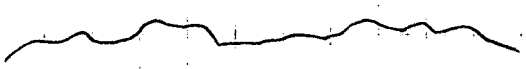
# NOVEMBER 1981 pH violations

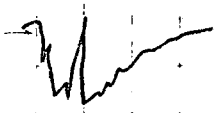
| | | | min | max | character | |
|---|---|---|---|---|---|---|
| | 11/23 | 0945 – 1015 | 5.0 | — | | — just cleared probes prior at 9:30 |
| | | 1100 – 1105 | 3.8 | — | | |
| | | 1120 – 1145 | 3.6 | — | | |
| | 11/20 | 0935 – 0940 | 4.7 | — | | |
| | | 0950 – 10:25 | 3.6 | — | | 4 none stated regen |
| | 11/19 | 1635 – 1640 | ~~9.~~ | 9.7 | | "flow checks" |
| | | 1845 – 1850 | — | 9.3 | | |
| | | 0830 – 0845 | 3.6 | — | | none stated regen |
| | 11/15 partial plant S/D | 1440 – 1450 | — | 9.7 | | |
| | | 1520 – 1540 | — | 9.6 | | |
| | 11/14 partial plant S/D | 0055 – 0105 | 5.1 | — | | |
| | | 0235 – 0240 | 5.5 | — | | |
| | | 0510 – 0540 | ~~9.3~~ | 9.3 | | |
| power failure all right 5 times | | 0700 – 0720 | — | 9.4 | | |
| | | 0725 – 0750 | 3.8 | — | | |
| | | 0750 – 0910 | — | 9.5 | | |
| | | 0940 – 1040 | — | 9.6 | | |
| | 11/13 plant S/D | 1530 – 1605 | — | 9.2 | | |
| | | 1655 – 1720 | — | 9.1 | | |
| | 11/12 plant S/D | 0000 – 0630 | 5.1 | ~~9.4~~ | | "out of line" |
| | | 0620 – 0630 | — | 10.0 | | |
| | 11/10 plant S/D | 0240 – 0245 | — | 9.2 | | |
| | | 0300 – 0305 | — | 9.6 | | |
| | 11/8 partial plant S/D | 0225 – 0225 | 3.1 | — | | regeneration |

871452

SCOEPA00034980

| | | | |
|---|---|---|---|
| 11/2 | 0155 - 0200 | — | 9.4 |
| 11/1 | 0920 - 0940 | — | 9.1 |
| | 0955 - 1010 | — | 9.3 |
| | 1040 - 1505 | — | 9.7 |
| | 1505 - 1540 | — | 9.4 |
| | 1600 - 1620 | — | 9.2 |
| 11/30 | 0335 - 0405 | 3.3 | — |






| pH day violations | min | max |
|---|---|---|
| = 12 | 3.1 | 10.0 |

4 for regeneration of mixed beds. → pH 3.1 - 3.6 usually
1 for no lime → 5.1 to 10.0
1 for power failures → 3.8 to 9.6
2 for clarifier flow checks → 9.4 to 9.7
1 probe cleaning followed by problems → 3.6
~~3~~ for no real good reason — min pH in spec
just wandering above 9.0 — max 9.7

12

WACKER

WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

November 20, 1981

Department of Environmental Quality
Water Quality Division
P.O. Box 1760
Portland, Oregon 97207

Attention: Chuck Clinton

Dear Sir:

For your information, I have assembled a list of activities and observations for the month of October, 1981 as related to the N.P.D.E.S. parameters.

FLUORIDE

The fluoride level continues to be stable and within limitations, (see Fig. No. 1).

BOD

The labelling and color coding of building drains and personnel training sessions are continuing as identified last month.

TSS

Operations of the wastewater clarifier have been improved and have resulted in more stable operations of this equipment.

Operation of the clarifier remains a very delicate procedure and is easily upset by a variety of parameters.

pH

pH stability remains as the greatest control problem.

Also, during the month of October, operations were suspended and the plant shut-down from the 10th to the 18th.

Sincerely,

James R. Ellis
Facilities Manager

DD/kk
Attachment

cc: Steve Beiswenger
Dirk Dunning
Gary Pendleton
John Pittman
Mal Russ
File

SCOEPA00034982

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME: WACKER SILTRONIC CORP.
ADDRESS: P.O. BOX 03180
PORTLAND, OREGON 97203-0180
HYPER-PURE SILICON PLANT
FACILITY: 7200 N.W. FRONT AVE
LOCATION: PORTLAND, OREGON 97229

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)
## DISCHARGE MONITORING REPORT (*DMR*)

Form Approved
OMB No. 158 - R0073

(2-16) OR 0030[illegible]3-9 — PERMIT NUMBER

(17-19) 019 — DISCHARGE NUMBER

2834-5
File No. 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 10 | 01 | TO | 81 | 10 | 31 |

**NOTE: Read Instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROCESS WASTEWATER FLOW | SAMPLE MEASUREMENT | 621.8 | 1074.8 | $m^3/d$ | — | — | — | — | 0 | DAILY | TOTAL RECORD. |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | 0 | DAILY | TOTAL RECORD |
| BOD | SAMPLE MEASUREMENT | 27 | 41 | kg/d | 29 | 38 | 44 | mg/l | 3 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24HC |
| TSS | SAMPLE MEASUREMENT | 7.7 | 8.9 | kg/d | 9 | 11 | 13 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24HC |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.002 | 0.006 | kg/d | 0.001 | 0.004 | 0.010 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.01 | 0.05 | | — | 0.02 | 0.05 | | 0 | 1/7 | 24HC |
| $Cr^{Total}$ | SAMPLE MEASUREMENT | 0.004 | 0.007 | kg/d | 0.004 | 0.006 | 0.012 | mg/l | 6 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.2 | 0.5 | | — | 0.3 | 1.0 | | 0 | 1/7 | 24HC |
| $F^-$ | SAMPLE MEASUREMENT | 2.9 | 4.0 | kg/d | 3.6 | 4.1 | 4.8 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6 | 20 | | 0 | 1/7 | 24HC |
| pH | SAMPLE MEASUREMENT | — | — | — | 2.6 | — | 11.2 | pH UNITS | 16 | DAILY | CONT |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | DAILY | CONT |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| JOHN PITTMAN<br>DIRECTOR OF ENGRG<br>TYPED OR PRINTED | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | John Pittman<br>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | 503 (AREA CODE) | 243-2020 (NUMBER) | 81 (YEAR) | 11 (MO) | (DAY) |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)

~~* ① - Third request. We are out of forms and need more!~~

② - Plant was shutdown from 10/10 to 10/18.



SCOEPA00034983

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME WAFER SILTRONIC CORP
ADDRESS P.O. BOX 03180
PORTLAND, OREGON 97203-0180
HYPER-PURE SILICON PLANT
FACILITY 7200 N.W. FRONT AVE
LOCATION PORTLAND, OREGON 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)
**DISCHARGE MONITORING REPORT (*DMR*)**

*Form Approved OMB No. 158 - R0073*

(2-16) OR00305[illegible]-9 — PERMIT NUMBER
(17-19) 019 — DISCHARGE NUMBER

2834-5
File No. 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 91 | 10 | 01 | TO | 91 | 10 | 31 |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COOLING WATER AND BOILER BLOWDOWN TOTAL $PO_4$ | SAMPLE MEASUREMENT | — | — | — | 0.2 | 0.6 | 0.7 | mg/l | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | 0 | 1/7 | GRAB |
| FLOW | SAMPLE MEASUREMENT | 632.5 | 821.1 | $m^3/d$ | — | — | — | — | — | DAILY | RECORD |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | DAILY | RECORD |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |
| COMBINED OUTFALL PH | SAMPLE MEASUREMENT | — | — | — | 6.7 | — | 7.7 | PH UNITS | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | 1/7 | GRAB |
| TEMPERATURE | SAMPLE MEASUREMENT | — | — | — | — | — | 23.6 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | 0 | 1/7 | GRAB |
| FREE AVAIL. CHLORINE | SAMPLE MEASUREMENT | — | — | — | 0 | 0 | 0 | mg/l | 0 | DURING CHLOR. | GRAB |
| | PERMIT REQUIREMENT | — | — | — | — | 0.2 | 0.5 | | 0 | DURING CHLOR | GRAB |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| JOHN PITTMAN DIRECTOR OF ENGRG | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | John Pittman | 503 | 243-2020 | 81 | 11 | |
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)



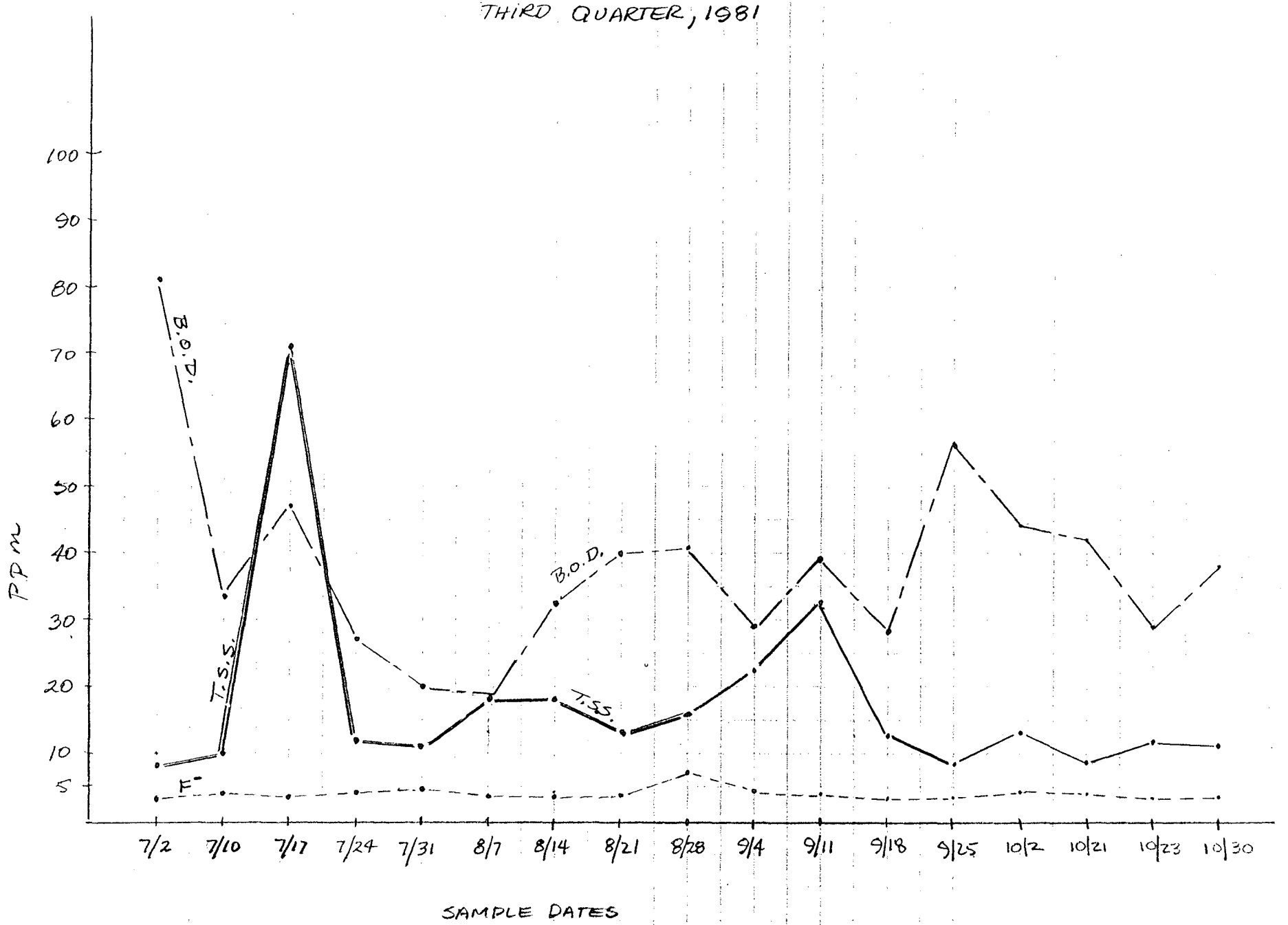
SCOEPA00034984

FIGURE NO. 1 - WACKER ELECTRONIC CORP.

N.P.D.E.S. DISCHARGE PARAMETERS

THIRD QUARTER, 1981

JRE /81




SCOEPA00034985

MONTH October WASTEWATER FLOW SHEET.
YEAR 1981

| | NEUTRALIZED ORGANIC WASTE. | | COMBINED EFFLUENT | | METER VAULT (SANITARY) #2 | | METER VAULT #3 COOLING TOWER B/D. | | | | COMB. DISCH. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * TOTALIZER GAL X 0.1 | DAILY FLOW m³ | * TOTALIZER GAL X 0.1 | DAILY FLOW m³ | * TOTALIZER GAL X 0.01 | DAILY FLOW m³ | * TOTALIZER GAL X 0.01 | DAILY FLOW m³ | pH | °C | pH | °C |
| 1 | 171096 | | 340144 | 889.8 | 168603 | | 440475 | (629.7) | | | | |
| 2 | 183000 | | 363650 | 569.1 | — | | — | (629.7) | | | George | |
| 3 | 190512 | | 378684 | 197.2 | 169080 | | 443802 | 509.5 | | | | |
| 4 | 192280 | | 383893 | 462.5 | 170196 | | 445148 | 576.5 | | | | |
| 5 | 197025 | | 396110 | 991.1 | 170738 | | 446671 | 677.2 | | | | |
| 6 | 209049 | | 420970 | 1005.6 | 171266 | | 448460 | 631.8 | | | | |
| 7 | 220064 | | 447535 | 812.8 | 171801 | | 450129 | 634.4 | | | | |
| 8 | 233127 | | 469006 | 1008.7 | 172328 | | 451805 | 612.1 | | | | |
| 9 | 245211 | | 495652 | 586.8 | 172854 | | 453422 | 559.5 | | | | |
| 10 | 252067 | | 511154 | 348.8 | 173370 | | 454900 | (665.6) | | | | |
| 11 | 256187 | | 520369 | (353.5) | — | | — | (665.6) | | | George | |
| 12 | NO LOGS | | — | (353.5) | — | | — | (665.6) | | | | |
| 13 | " " | | — | (353.5) | — | | — | (665.6) | | | | |
| 14 | " " | | — | (353.5) | — | | — | (665.6) | | | | |
| 15 | " " | | — | (353.5) | — | | — | (665.6) | | | | |
| | PLANT SHUTDOWN | | | | | | | | | | | |
| 16 | " " | | — | (353.5) | — | | — | (665.6) | | | | |
| 17 | " " | | — | (353.5) | — | | — | (665.6) | | | | |
| 18 | " " | | — | (353.5) | — | | — | (665.6) | | | | |
| 19 | " " | | — | (353.5) | — | | — | (665.6) | | | | |
| 20 | 290272 | | 604415 | 1062.6 | — | | — | (665.6) | | | Mike | |
| 21 | 302717 | | 632487 | 984.2 | 178628 | | — | (665.6) | | | Mike | |
| 22 | 316545 | | 658207 | 833.2 | 179099 | | 476001 | 333.1 | | | | |
| 23 | 328701 | | 680497 | 640.3 | 179573 | | 476681 | 710.9 | | | | |
| 24 | 337672 | | 697911 | 296.8 | 180105 | | 478759 | (628.6) | | | | |
| 25 | 340609 | | 705252 | 635.5 | — | | — | (628.6) | | | Mike | |
| 26 | 347133 | | 722039 | 948.3 | 181100 | | 482080 | 703.7 | | | | |
| 27 | 359773 | | 747090 | 1074.8 | 181577 | | 483939 | 662.5 | | | | |
| 28 | 371632 | | 775484 | 1008.1 | 182026 | | 485689 | 821.1 | | | | |
| 29 | 383732 | | 802114 | 999.1 | 182524 | | 487858 | 660.9 | | | | |
| 30 | 394686 | | 828508 | 606.7 | 182903 | | 489604 | (547.8) | | | | |
| 31 | 403425 | | 844534 | 182.0 | — | | — | (547.8) | | | George | |
| 1 | 405564 | | 849342 | — | — | | — | | | | George | |
| MAX | | | | 1074.8 | 184305 | | 493945 | 821.1 | | | | |
| AVE | Δ/26.417 | | Δ/26.417 | 621.8 | Δ/26.417 | | Δ/2.647 | 632.5 | | | | |
| MIN | | | | 182.0 | | | | 333.1 | | | | |

COMMENTS — * - All GPD A.M. Readings.

| | GPD | GPM | TOT. |
|---|---|---|---|
| Max | 255510 | 174.0 | 175000 121.5 | |
| Ave | 164257 | 114.1 | 167094 116.0 | 230.1 |
| Min | 16026 | 11.1 | 88000 61.1 | |

62.8 GPM one during S/D to sewer. 187.0 GPM one during S/D to river

SCOEPA00034986

EFFICIENCY® LINE 22-213

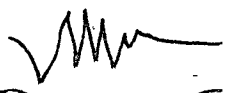
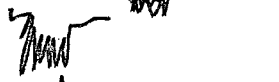
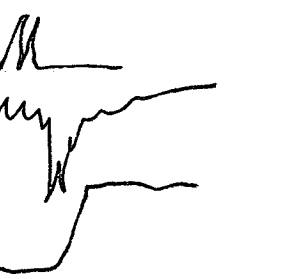
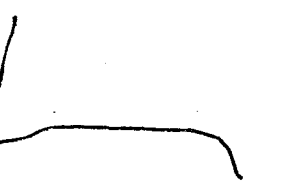
MONTH: OCTOBER
YEAR: 1981

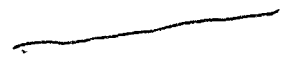
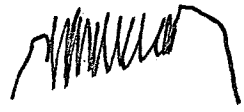
Wastewater Report (Columns are in mg/L and Kg/Day respectively, $m^3$/Day, and pH units/ °C )

| | Process Flow | BOD | | TSS | | $Cr^{6+}$ | | Cr | | $F^-$ | | MV#3 Flow | $PO_4^{\equiv}$ | CD pH/T | MV3 pH/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | |
| 2 | * 569.1 | 44 | 25 | 13 | 7.4 | 0.002 | 0.001 | 0.004 | 0.002 | 4.8 | 2.7 | | 0.7 | 6.7/23.6 | 6.3/18.8 |
| 3 | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | PLANT SHUT- | | | | | | | | | | | | | | |
| 13 | DOWN | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | * 984.2 | 42 | 41 | 9 | 8.9 | 0.001 | 0.001 | 0.004 | 0.004 | 4.1 | 4.0 | | 0.7 | 7.7/21.3 | 6.7/18.6 |
| 22 | | | | | | | | | | | | | | | |
| 23 | * 640.3 | 29 | 19 | 12 | 7.7 | 0.001 | 0.001 | 0.005 | 0.003 | 3.6 | 2.3 | | 0.2 | 7.2/23.2 | 6.3/19.7 |
| 24 | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | |
| 30 | * 606.7 | 38 | 23 | 11 | 6.7 | 0.010 | 0.006 | 0.012 | 0.007 | 3.9 | 2.4 | | 0.7 | 7.6/22.7 | 6.2/18.4 |
| 31 | | | | | | | | | | | | | | | 6.2/6.7 pH |
| | Ave. 621.8 | 38 | 27 | 11 | 7.7 | 0.004 | 0.002 | 0.006 | 0.004 | 4.1 | 2.9 | 632.5 | 0.6 | 6.7/7.7 | - 19.7 T |
| | Min./Max. 182.0/1074.8 | 29/44 | 19/41 | 9/13 | 6.7/8.9 | 0.001/0.010 | 0.001/0.006 | 0.004/0.012 | 0.003/0.007 | 3.6/4.8 | 2.3/4.0 | 333.1/821.1 | 0.7/0.7 | -23.6 | |

SCOEPA00034987

# October pH violations.

| Date | Time | Δ | pH | reason | diagram |
|---|---|---|---|---|---|
| 10-28 | 0540 – 0550 | | 5.6 | none |  |
| 10-27 | 1645 – 1700 | | 5.2 | none | |
| 10-26 | 2050 – 2115 | | 4.2 | regeneration |  |
| 10-25 | 2130 – 2140 | | 5.0-9.8 | none | |
| 10-24 | 1655 – 1730 | | 4.2 | regeneration | |
| 10-20 | 1958 – 2000 | | 9.4 | none | |
| 10-19 | 1635 – 1640 | | 9.4 | none |  |
| | 1025 – 10-40 | | 4.2 | none | |
| | 855 – 920 | | 3.5 | none | |
| 10-18 | 1120 – 1122 | | 4.5 | none |  |
| | 1230 – 1410 | | 9.5 | none | |
| shutdown. | 1445 – 1515 | | 9.5 | none | |
| | 1550 – 1615 | | 9.5 | " | ⌀ same |
| | 1700 – 1725 | | 9.5 | " | same |
| | 1815 – 1830 | | 9.5 | " | same |
| 10-17 | 1005 – 1010 | | 4.6 | none | |
| shutdown | 1030 – 1040 | | 4.1 | " | |
| | 1059 – 1110 | | 4.6 | " | |
| 10-12 | ~~0000~~ 1840 – 1900 | | 9.3 | none | |
| shutdown | 1915 – 1945 | | 9.4 | | etc... |
| | 1950 – 2020 | | 9.4 | | |
| | 2035 – 2100 | | 9.4 | | |
| | 2120 – 2140 | | 9.4 | | |
| | 2205 – 2225 | | 9.3 | | |
| | 2250 – 2310 | | 9.2 | | |
| | 2330 – 2350 | | 9.2 | | |

| | | | | |
|---|---|---|---|---|
| 10-12 | 0645 – 0800 | 4.8 | none | |
| shutdown → | 0200 – 0100 | 5.8 | none |  |
| 10-11 | 0000 – 2359 all day!! | 2.6 | none | |
| shutdown → | | | | |
| 10-10 | 0040 – 1320 | 2.7 | none | |
| shutdown → | 1755 – 2315 | 10.2 | none | |
| 10-9 | 1210 – 1320 | 10.9 | none | |
| 10-8 | 1550 – 1645 | 11.2 | none |  |
| 10-5 | 2150 – 2230 | 9.8 | none | |
| not counted → 10-3 * | 1929 – 1930 | 4.3 | none – spike | |

---

Summary through 10-28

max – 11.2
min – 2.6

pH days in violation = 16

during shutdown = 5 days.

no other violations through end of month

SCOEPA00034989

WACKER

WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

October 19, 1981

Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Attention: Mr. Stephen C. Carter

Dear Sir:

For your information I have assembled a list of activities and observations for the month of September, 1981 as related to the N.P.D.E.S. Parameters:

FLUORIDE

The fluoride level continues to be stable and within limitations, (see Figure No.1).

~~BOB~~ BOD

A plan for labelling and color-coding of all machine and floor drains in the Process Building has been initiated. While the placement of some 115 drain labels ~~in~~ 15 progressing, training sessions have been held for production, laboratory and engineering personnel. These training sessions will enable employees to:

a) Identify all drain systems,

b) Identify chemicals for disposal in these drain systems, and,

c) Prevent the disposal of chemicals which are not specifically identified for a drain system.

The first training session was held on September 30, 1981. The drain labelling is scheduled for completion by November 30, 1981.

SCOEPA00034990

WACKER

It is our hope that this program will help reduce B.O.D. peaks.

TSS

We are continuing to work on the optimization of the clarifier operation. TSS results (see Figure no.1) for the month were relatively stable and improving.

PH

PH stability remains a problem but work continues.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis
Facilities Manager

JE/md

Attach

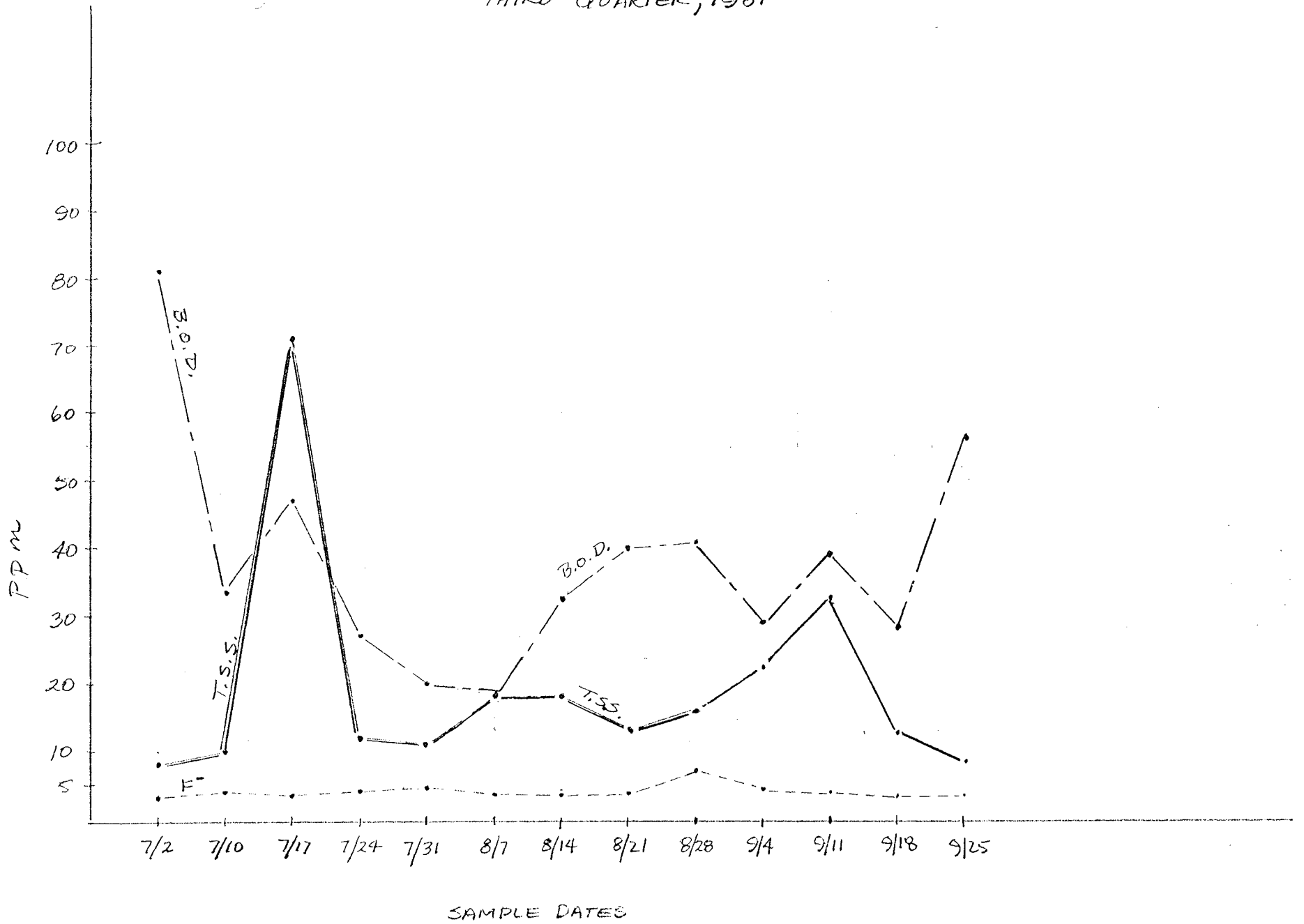
cc: Steve Beiswenger
Dirk Dunning
Gary Pendleton
John Pittman
Mal Russ
File

FIGURE NO. 1 – WACKER SILTRONIC CORP.

N.P.D.E.S. DISCHARGE PARAMETERS

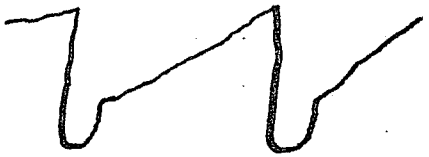
THIRD QUARTER, 1981

JRE
8/81




SCOEPA00034992

# pH VIOLATION DAYS SEPT. 1981

| DATE | TIME | DURATION (MIN) | MAX pH | MIN pH | REASON STATED | CURVE CHARACTER. |
|---|---|---|---|---|---|---|
| 9/1/81 | 1415-1425 | 10 | — | 9.0 | none | |
| 9/8/81 | 0935-1010 | 35 | — | 3.2 | "regeneration" | |
| 9/12/81 | 1300-1335 | ~~9.3~~ 35 | 9.3 | — | none | |
| | 1410-1525 | ~~9.4~~ 75 | 9.4 | — | (wierd cycling) |  |
| | 1615-1650 | ~~9.6~~ 35 | 9.6 | — | | |
| | 1730-1815 | ~~9.9~~ 45 | 9.9 | — | | |
| | 1845-1940 | ~~9.7~~ 55 | 9.7 | — | | |
| | 2020-2030 | ~~9.3~~ 10 | 9.3 | — | | |
| 9/13/81 | 0040-0110 | 30 | 9.4 | — | none | same as 9/12/81 |
| 9/14/81 | 2230-2245 | 15 | 9.4 | — | none (oscillating controller) | |
| 9/21/81 | 0920-1050 | 90 | — | 3.2 | none | |
| | 1910-2020 | 70 | 11.3 | — | "Lime tank dumped" | |
| 9/29/81 | 1000-1015 | 15 | — | 5.1 | none | |
| 9/30/81 | 0850-0905 | 15 | — | 5.0 | none | |
| TOTAL | 8 days | 535 | 11.3 | 3.2 | | |

SCOEPA00034993

MONTH SEPT.
YEAR 1981

# WASTEWATER FLOW SHEET.

| | NEUTRALIZED ORGANIC WASTE. | | COMBINED EFFLUENT | | METER VAULT (SANITARY) #2 | | METER VAULT #3 COOLING TOWER B/D. | | | | COMB. DISCH. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * TOTALIZER GAL X 0.1 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.1 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.01 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.01 | DAILY FLOW $m^3$ | pH | °C | pH | °C |
| 1 | 927870 | 488.4 | 791051 | 1107.2 | 153667 | | ~~110918~~ | ~~WRONG~~ | | | | |
| 2 | 946771 | 425.1 | 820299 | 999.2 | 154238 | | ~~111804~~ | ~~WRONG~~ | | | | |
| 3 | 952001 | 467.4 | 846695 | 720.7 | 154615 | | 391769 | 812.0 | | | | |
| 4 | 964348 | 238.4 | 865998 | 746.0 | 155146 | | 393914 | 552.7 | | | | |
| 5 | 970446 | 52.2 | 885704 | 405.5 | 155615 | | 395374 | 618.2 | | | | |
| 6 | 972026 | 86.9 | 896417 | 372.4 | 156100 | | 397007 | 573.9 | | | | |
| 7 | 974321 | 143.5 | 906255 | 377.5 | 156524 | | 398523 | 718.9 | | | | |
| 8 | 978111 | 432.7 | 916227 | 824.2 | 156997 | | 400422 | 850.6 | | | | |
| 9 | 989541 | 457.9 | 937999 | 1037.6 | 157505 | | 402669 | 693.9 | | | | |
| 10 | 001638 | 452.4 | 965408 | 987.7 | 158017 | | 404502 | 711.3 | | | | |
| 11 | 013590 | 265.5 | 991499 | 648.0 | 158525 | | 406381 | 784.0 | | | | |
| 12 | 020604 | 63.4 | 008616 | 190.6 | 159008 | | 408452 | 659.8 | | | | |
| 13 | 027278 | 171.3 | 013652 | 412.6 | 159472 | | 410195 | 653.4 | | | | |
| 14 | 036804 | 434.1 | 024538 | 896.2 | 159916 | | 411921 | 829.4 | | | | |
| 15 | 038272 | 414.8 | 048214 | 929.3 | 160431 | | 414112 | 819.2 | | | | |
| 16 | 049229 | 397.4 | 072762 | 865.5 | 160932 | | 416276 | 824.8 | | | | |
| 17 | 059727 | 359.1 | 095627 | 849.7 | 161416 | | 418455 | 726.0 | | | | |
| 18 | 069214 | 227.4 | 118073 | 711.6 | 161967 | | 420373 | (636.5) | | | | |
| 19 | 075222 | 53.1 | 136871 | 219.4 | N.T. | | N.T. | (636.5) | | | | |
| 20 | 076626 | 149.6 | 142667 | 373.5 | 163000 | | 423736 | 433.4 | | | | |
| 21 | 081634 | 371.9 | 152533 | 998.6 | 163394 | | 424881 | 774.9 | | | | |
| 22 | 091459 | 390.4 | 178912 | 822.2 | 164081 | | 426928 | 647.7 | | | | |
| 23 | 101773 | 403.3 | 200633 | 794.1 | 164589 | | 428639 | 579.6 | | | | |
| 24 | 112426 | 392.9 | 221612 | 769.7 | 165078 | | 430170 | 653.0 | | | | |
| 25 | 122806 | 227.8 | 241945 | 506.3 | 165657 | | 431895 | 410.0 | | | | |
| 26 | 128825 | 56.6 | 255319 | 161.1 | 166038 | | 432978 | (495.9) | | | | |
| 27 | 130319 | 184.6 | 259574 | 300.0 | N.T. | | N.T. | (495.9) | | | | |
| 28 | 135195 | 469.5 | 267499 | 931.7 | 166996 | | 435598 | 640.5 | | | | |
| 29 | 147597 | 434.9 | 292111 | 879.7 | 167542 | | 437290 | 593.6 | | | | |
| 30 | 159085 | 454.9 | 315351 | 938.5 | 168059 | | 438858 | 612.1 | | | | |
| 31 | — | — | — | — | — | | — | — | | | | |
| 1 | 171096 | — | 340144 | — | 168603 | | 440475 | — | | | | |
| MAX | Δ/26.417 | 488.4 | Δ/26.417 | 1107.2 | Δ/26.417 | | Δ/2.6417 | 850.6 | | | | |
| AVE | | 306.9 | | 692.9 | | | | 658.5 | | | | |
| MIN | | 52.2 | | 161.1 | | | | 410.0 | | | | |

COMMENTS — * — All 8:00 A.M. READINGS.

SCOEPA00034994

EFFICIENCY® LINE 22-213

MONTH: SEPT.
YEAR: 1981

Wastewater Report (Columns are in mg/L and Kg/Day respectively, $m^3$/Day, and pH units/ $^oC$ )

| | $m^3$ Process Flow | BOD | | TSS | | $Cr^{6+}$ | | Cr | | $F^-$ | | MV#3 Flow | $PO_4^{\equiv}$ | CD pH/T | MV3 pH/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | |
| 4 | 746.0 | 29 | 21.6 | 23 | 17.2 | 0.010 | 0.007 | 0.011 | 0.008 | 4.8 | 3.6 | | 0.7 | 6.9/27 | 7.2/22 |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | 648.0 | 39 | 25.3 | 33 | 21.4 | 0.002 | 0.001 | 0.006 | 0.004 | 4.5 | 2.9 | | 0.4 | 7.4/24.3 | 7.9/24.2 |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | 711.6 | 28 | 19.9 | 13 | 9.3 | 0.001 | 0.001 | 0.001 | 0.001 | 3.8 | 2.7 | | 5.4 | 6.9/26.5 | 7.4/25.1 |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |
| 25 | 506.3 | 57 | 28.9 | 8 | 4.0 | 0.040 | 0.02 | 0.042 | 0.021 | 4.2 | 2.1 | | 1.6 | 7.2/26.5 | 6.3/23.2 |
| 26 | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | 6.9/7.4 | 6.3/7.9 |
| | Ave. 692.9 | 38 | 23.9 | 19 | 13.0 | 0.013 | 0.007 | 0.015 | 0.009 | 4.3 | 2.8 | 658.5 | 2.0 | | |
| | Min./Max. 161.1 / 1107.2 | 29/57 | 19.9/28.9 | 8/33 | 4.0/21.4 | 0.001/0.040 | 0.001/0.02 | 0.001/0.042 | 0.001/0.021 | 3.8/4.8 | 2.1/3.6 | 410.0/850.6 | 0.4/5.4 | 27 | 25.8 |

SCOEPA00034995

Dirk Dunning

WACKER

# WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

October 7, 1981

The Department of Environmental Quality
P.O. Box 1760
Portland, OR 97207

Attention: Mike Ebeling

This report is tendered to meet the requirements of OAR 63-235 for hazardous waste materials for the third quarter of 1981. Wastes were delivered to the management facility indicated, both having approval for material receipt.

Generator:

Wacker Siltronic Corporation
Hyper-Pure Silicon Plant
7200 N.W. Front Avenue
Portland, OR 97229

Phone: 503-243-2020

I.D. No.: 94-2518330

Transporter:

Widing Transportation
10145 North Portland Road
Portland, OR 97217

Phone: 503-286-3661

I.D. No.: HWT-13

SCOEPA00034996

WACKER



Chromic Acid and Hydroflouric Acid Waste Solution: EPA #D007

| Shipping Date | Manifest Number | Received Date | Quantity | No. | Containers | Physical State | Incidents & Discrepancies |
|---|---|---|---|---|---|---|---|
| 07/14/81 | 38620 | 07/14/81 | 262 Gal. | 1 | Bulk | Liquid | None |
| 07/31/81 | 38625 | 07/31/81 | 2180 Gal. | 1 | Bulk | Liquid | None |
| 08/17/81 | 38627 | 08/17/81 | 3100 Gal. | 1 | Bulk | Liquid | None |
| 08/27/81 | 38637 | 08/27/81 | 110 Gal. | 2 | Drums | Liquid | None |
| 09/01/81 | 38626 | 09/01/81 | 21000 Gal. | 1 | Bulk | Liquid | None |
| 09/18/81 | 42739 | 09/18/81 | 2200 Gal. | 1 | Bulk | Liquid | None |

Miscellaneous Waste Solutions: N.O.S.

| Shipping Date | Manifest Number | Received Date | Quantity | No. | Containers | Physical State | Incidents & Discrepancies |
|---|---|---|---|---|---|---|---|
| 08/27/81 | 38637 | 08/27/81 | 880 Gal (Colloidal Silica Polishing Compound) | 16 | Drums | Liquid | None |
| | | | 220 Gal. (Potasium Compound-Surfactant) | 4 | Drums | Liquid | None |
| | | | 110 Gal. (Non specific Waste-Surfactant) | 2 | Drums | Liquid | None |

Approximate Composition:
13% Chromium Trioxide
6% Hydrofluoric Acid
Balance, Water
Trace minerals, salts and lime to neutralize the solution

Classification: Corrosive

Management Facility:
Chem-Security Systems, Inc
Star Route
Arlington, OR 97812

Phone: 503-454-2777 (Arlington)
503-223-1912 (Portland)

EPA ID #ORD 08-945-2353

SCOEPA00034997

WACKER



Trichlorethylene Waste Shipped:

| Shipping Date | Manifest Number | Received Date | Quantity | No. | Con-tainers | Physical State | Incidents & Discrep-ancies |
|---|---|---|---|---|---|---|---|
| 07/01/81 | 070181A | 07/01/81 | 385 Gal. | 7 | Drums | Liquid | None |
| 07/09/81 | 070781A | 07/09/81 | 44,980 Lb. | 1 | Bulk | Liquid | None |
| 07/22/81 | 072281A | 07/22/81 | 51,420 Lb. | 1 | Bulk | Liquid | None |
| 08/14/81 | 081381A | 08/14/81 | 49,760 Lb. | 1 | Bulk | Liquid | None |
| 09/01/81 | 090181A | 09/01/81 | 48,420 Lb. | 1 | Bulk | Liquid | None |
| 09/09/81 | 090881A | 09/09/81 | 47,120 Lb. | 1 | Bulk | Liquid | None |
| 09/17/81 | 090381A | 09/17/81 | 825 Gal. | 15 | Drums | Liquid | None |
| 09/23/81 | 092281A | 09/23/81 | 48,120 Lb. | 1 | Bulk | Liquid | None |
| 09/28/81 | 092581A | 09/28/81 | 36,800 Lb. | 1 | Bulk | Liquid | None |

Approximate Composition:

8% Trichlorethylene
2% 2-Propanol
1% Freons
1% Organic Soaps
Balance, Water
Traces: Silicon, metals, salts
This material is vaiable in composition

Classification: Toxic

Management Facility:

Van Waters & Rogers
3950 NW Yeon Avenue
Portland, OR 97210

Phone: 503-222-1721

EPA ID #ORD 009-227-398

WACKER SILTRONIC CORPORATION

M A Borrevik

Martin A. Borrevik
Purchasing Manager

SCOEPA00034998

WACKER

# WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

September 4, 1981

Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Attention: Mr. Stephen C. Carter

Dear Sir:

For your information I have assembled a list of activities and observations for the month of August, 1981 as related to the N.P.D.E.S. parameters:

FLUORIDE

The fluoride level continues to be stable and within limitations, (see Fig. No. 1).

BOD

As mentioned last month, to improve upon current BOD levels, it is imperative that a drain labelling and employee training program be initiated throughout the entire plant. This project has now been organized and labelling/training portion of the program will be completed by mid-October.

TSS

It appears that experimentation with the variables affecting the clarifier are beginning to yield more stable and improved TSS results. Improvement can be attributed to optimizing the feed location and rate of the Betz anionic polymers and to the revised operation of the rotary vacuum filter.

PH

PH stability remains a problem but work continues to gain improvement here also.

If there are any questions please call.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis
Facilities Manager

JE/kk

cc: Beiswenger, Dunning, Pendleton, Pittman, Russ, File

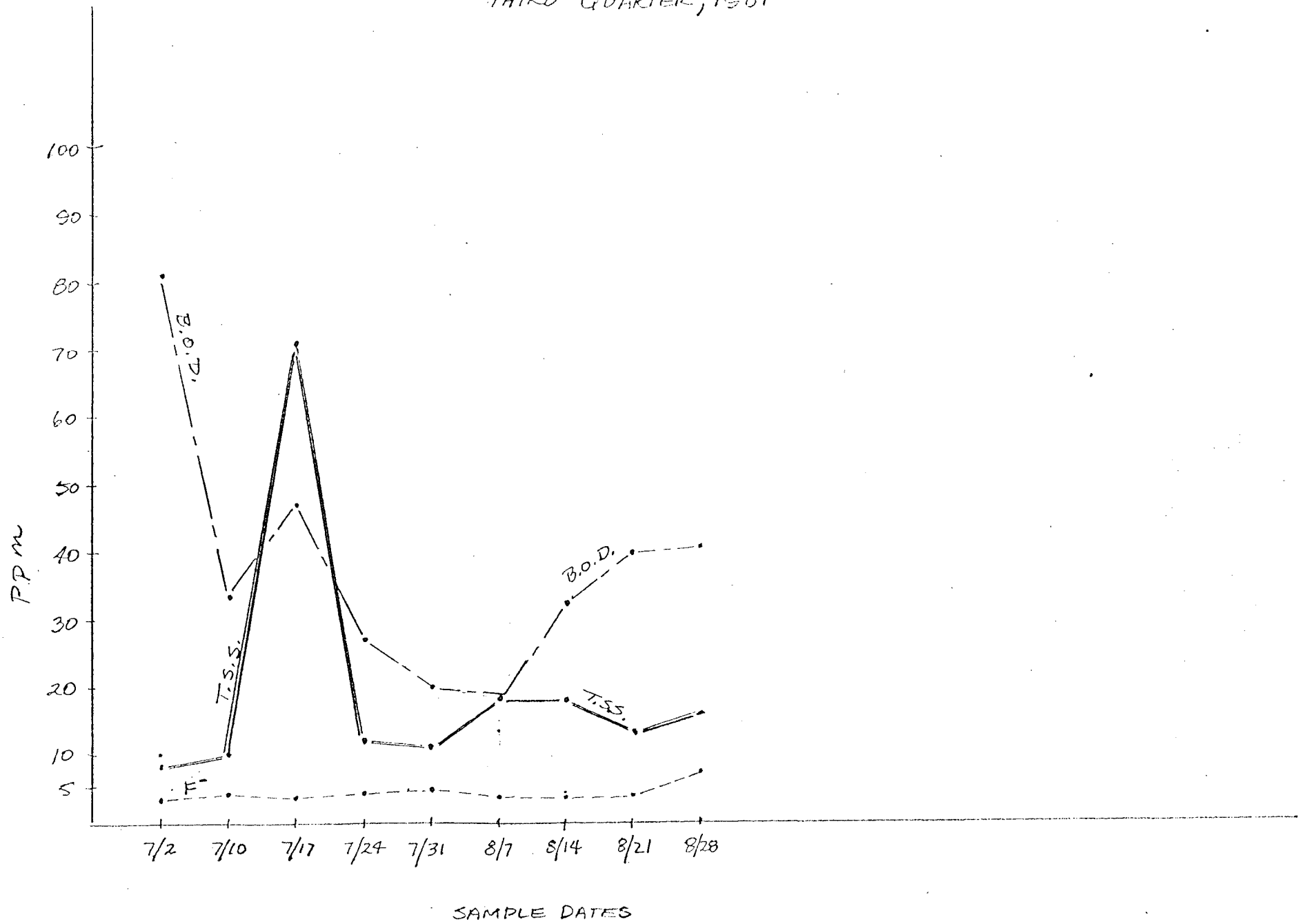
Attachment

SCOEPA00034999

FIGURE NO. 1 - WACKER SILTRONIC CORP.

N.P.D.E.S. DISCHARGE PARAMETERS

THIRD QUARTER, 1981




SCOEPA00035000

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME: [illegible] SILICONE CORP.

ADDRESS: P.O. BOX 03160
PORTLAND OREGON 97203

FACILITY: HYPER-PURE SILICON PLANT

LOCATION: 7200 N.W. FRONT AVE.
PORTLAND, OREGON 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)
DISCHARGE MONITORING REPORT (*DMR*)

*Form Approved*
*O[illegible] No. 158 - R0073*

(2-16) PERMIT NUMBER: OR0003058-4

(17-19) DISCHARGE NUMBER: 017

2834-J
File # 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 08 | 01 | TO | 81 | 08 | 31 |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater FLOW | SAMPLE MEASUREMENT | 626.3 | 979.9 | ~~kg/d~~ $m^3$ | — | — | — | — | 0 | 7/7 | TOTAL RECORD |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| BOD | SAMPLE MEASUREMENT | 19.5 | 26.1 | kg/d | 18 | 33 | 41 | mg/l | 3 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TSS | SAMPLE MEASUREMENT | 9.7 | 14.0 | kg/d | 14 | 16.5 | 18 | mg/l | 1* | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.005 | 0.008 | kg/d | 0.004 | 0.018 | 0.02 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{TOTAL}$ | SAMPLE MEASUREMENT | 0.007 | 0.017 | kg/d | 0.001 | 0.014 | 0.04 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $F^-$ | SAMPLE MEASUREMENT | 2.5 | 3.0~~2.8~~ | kg/d | 3.4 | 4.5 | 7.3 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 2.8 | — | 11.0 | pH UNITS | 16 | 7/7 | CONT. |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| [illegible] FITTIARD<br>DIRECTOR OF ENGINEERING | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | John Pittman<br>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE: 503 | NUMBER: 243-2020 | YEAR: 81 | MO: 08 | DAY: |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)

* ONLY VIOLATION IS EXCEEDING MONTHLY AVERAGE CONCENTRATION.

— NEW SUPPLY OF FORMS IS NEEDED.

See attached letter to Mr. Stephen C. Carter dated 9/9/81.



SCOEPA00035001

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved*
*OMB No. 158-R0073*

(2-16) PERMIT NUMBER: OR 00 30 58-7

(17-19) DISCHARGE NUMBER: 017

2834-J
File # 93450

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 08 | 01 | TO | 81 | 08 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | QUANTITY OR LOADING (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | QUALITY OR CONCENTRATION (46-53) AVERAGE | QUALITY OR CONCENTRATION (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling Water and Boiler Blowdown Total $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | 0.2 | 0.9 | 1.6 | mg/l | 0 | 1/7 | grab |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Flow | SAMPLE MEASUREMENT | 733 | 959 | $m^3/d$ | — | — | — | — | 0 | 7/7 | TOTAL RECORD |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 7.1 | — | 8.8 | pH UNITS | 0 | 1/7 | grab |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TEMPERATURE | SAMPLE MEASUREMENT | — | — | — | — | — | 26.4 | °C | 0 | 1/7 | grab |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| FREE AVAIL. CHLORINE | SAMPLE MEASUREMENT | — | — | — | ~~0~~ | ~~0~~ | ~~0~~ | mg/l | 0 | during chlorin. | grab |
| | PERMIT REQUIREMENT | | | | | 0.2 | 0.5 | | | | |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| JOHN FITTMAN DIRECTOR OF ENGR'G. | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | John Fittman | 503 | 243-2020 | 81 | 08 |
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*



SCOEPA00035002

MONTH AUG
YEAR 81

# WASTEWATER FLOW SHEET.

30th St 325047

| | NEUTRALIZED ORGANIC WASTE. | | COMBINED EFFLUENT | | METER VAULT (SANITARY) #2 | | METER VAULT #3 COOLING TOWER B/D. | | | | COMB. DISCH. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X TOTALIZER GAL X 0.1 | DAILY FLOW $m^3$ | X TOTALIZER GAL X 0.1 | DAILY FLOW $m^3$ | X TOTALIZER GAL X 0.01 | DAILY FLOW $m^3$ | X TOTALIZER GAL X 0.01 | DAILY FLOW $m^3$ | pH | °C | pH | °C |
| 1 | 278146 | 337.2 | 637495 | | — | | — | (787.7) | | | | |
| 2 | 787054 | 441.8 | 641323 | | — | | — | (787.7) | | | | |
| 3 | 298724 | 979.9 | 647572 | | — | | 71648 | (787.7) | | | | |
| 4 | 324610 | 838.3 | 659930 | | — | | — | (787.7) | | | | |
| 5 | 346754 | 822.0 | 672507 | | 140975 | | 93288 | (787.7) | | | | |
| 6 | 368469 | 747.9 | 685966 | | 141496 | | 94149 | (787.7) | | | | |
| 7 | 388227 | 504.5 | 699170 | | 142083 | | 95287 | (787.7) | | | | |
| 8 | 401555 | 225.7 | 708102 | | 142548 | | 95875 | (787.7) | | | | |
| 9 | 407516 | 341.4 | 711345 | | — | | — | (787.7) | | | | |
| 10 | 416535 | 762.5 | 718599 | | 143405 | | 345855 | (870.3) | | | | |
| 11 | 436679 | 1870.4 | 730188 | | — | | — | (870.3) | | | | |
| 12 | 480807 | 877.6 | 742178 | | — | | — | (870.3) | | | | |
| 13 | 483990 | 929.3 | 752796 | | 144908 | | 352752 | 791.9 | | | | |
| 14 | 508540 | 779.8 | 765399 | | 145369 | | 354844 | 911.6 | | | | |
| 15 | 529140 | 238.6 | 773788 | | 145879 | | 357251 | 738.5 | | | | |
| 16 | 535444 | 332.7 | 776594 | | 146324 | | 359202 | 689.7 | | | | |
| 17 | 544232 | 698.9 | 783374 | | 146788 | | 361024 | 875.6 | | | | |
| 18 | 562696 | 524.2 | 796355 | | 147283 | | 363337 | 958.5 | | | | |
| 19 | 576545 | 467.5 | 808617 | | 147801 | | 365869 | 625.0 | | | | |
| 20 | 588895 | 912.7 | 821405 | | 148247 | | 367520 | 681.8 | | | | |
| 21 | 613006 | 653.4 | 832796 | | 148759 | | 369321 | 652.2 | | | | |
| 22 | 630266 | 247.8 | 841140 | | 149201 | | 371044 | 650.3 | | | | |
| 23 | 636812 | 405.4 | 843176 | | 149689 | | 372762 | 482.6 | | | | |
| 24 | 647521 | 977.7 | 849218 | | 150031 | | 374037 | 750.7 | | | | |
| 25 | 673348 | 805.4 | 861386 | | 150536 | | 376020 | (714.8) | | | | |
| 26 | 696738 | 868.9 | 873045 | | — | | — | (714.8) | | | | |
| 27 | 719691 | 777.4 | 884646 | | — | | — | (714.8) | | | | |
| 28 | 740228 | 413.6 | 897840 | | 151998 | | 381685 | ? | | | | |
| 29 | 751154 | 370.2 | 906641 | | — | | — | | | | | |
| 30 | 760934 | 415.0 | 909489 | | — | | — | | | | | |
| 31 | 771898 | 725.0 | 915138 | | 153217 | | 110324 | | | | | |
| 1 | 791051 | — | 927870 | | 153669 | | 111115 | | | | | |
| MAX | | 979.9 | | | | | | 958.5 | | | | |
| AVE | Δ/26.417 | 626.3 | Δ/26.417 | 354.6 | Δ/26.417 | 178.0 | Δ/2.6417 | 732.7 | | | | |
| MIN | | 225.7 | | | | | | | | | | |

COMMENTS — X — All 8:00 A.M. READINGS.

SCOEPA00035003

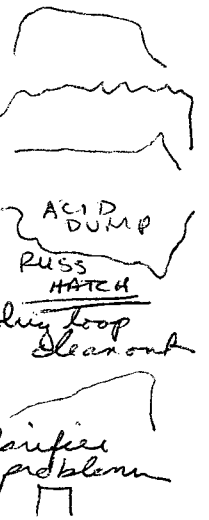
Aug 8-29 – 8-31

8-31 0250 – 0335 11,0
0515 – 0820 9.8
1500 – 1620 9.7

8-30 0945 – 1025 4.6
left – good

left – good 1940 – 2010 9.6

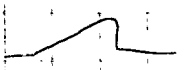
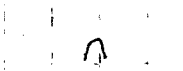
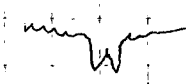
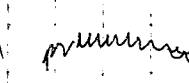
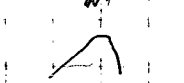
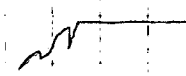
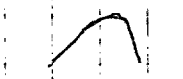
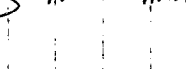
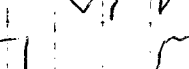
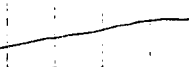
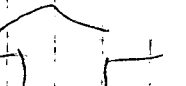
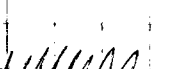
Kerley 2310 – 2325 10.5




8-29 no violations

SCOEPA00035004

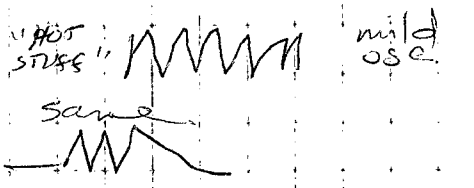
1981

| | | | |
|---|---|---|---|
| 8-28 | 1400 – 1445 | 10.1 |  |
| 8-27 | 0800 – 0805 | 9.3 |  |
| 8-24 | 1250 – 1310 | 3.5 |  HOT ACID WASTE (REGEN?) |
| 8-21 | 0810 – 0820 | median 8.9 peak 9.3 (not count) |  |
| 8-19 | 0100 – 0120 | 4.0 | |
| 8-14 | 1245 – 1305 | 9.8 |  water dept working on acid pumps |
| 8-14 | 0210 – 0435 | 10.9 |  very bad! |
| 8-13 | 1145 – 1215 | 10.2 |  |
| 8-11 | 1115 – 1117 | 9.4 | |
| | 1130 – 1135 | 9.7 | |
| 8-11 | 1220 – 1235 | 4.4 |  |
| | 10.45 – 1120 | 9.3 | |
| 8-10 | 1950 – 2040 | 9.4 | |
| 8-8 | 1805 – 2000 | 2.8 | |
| 8-6 | 0630 – 2045 | 9.7 oscillating all day |  |
| | 0245 – 0445 | 10.8 | |
| | 0050 – 0115 | 9.5 | |
| 8-5 → 8-6 | 1125 – 1220 | 3.6 |  |
| 8-5 | 0000 – 0040 | 9.3 |  oscillating |
| | 0200 – 0230 | 9.3 | |
| | 0720 – 0820 | 9.4 | |
| 8-4 | 0000 – 0030 | 10.0 |  osc |
| | 0145 – 0635 | 9.4 | |
| 8-3 | 2315 – 0000 | 10.0 | osc |
| | 2120 – 2140 | 9.5 | |
| | 1145 – 1430 | 10.0 | |

SCOEPA00035005

1981 8-3 0250 – 1000 10.0

8-1 0720 – 0815 10.3
0350 – 0410 10.4
0240 – 0250 9.6




through 8-29 0130 P.M.

days in pH violation

| | min | max |
|---|---|---|
| 8-1 | — | 10.4 |
| 8-3 | — | 10.0 |
| 8-4 | — | 10.0 |
| 8-5 | 3.6 | 9.4 |
| 8-6 | 3.6 | 10.8 |
| 8-8 | 2.8 | — |
| 8-10 | — | 9.4 |
| 8-11 | 4.4 | 9.7 |
| 8-13 | — | 10.2 |
| 8-14 | — | 10.9 |
| 8-19 | 4.0 | — |
| ~~8-21~~ | | ~~9.3~~ |
| 8-24 | 3.5 | — |
| 8-27 | — | 9.3 |
| 8-28 | — | 10.1 |
| TOTAL days = (14) thru 8-29 | 2.8 | 10.8 |
| 8-30 | 4.6 | — |
| 8-31 | — | 11.0 |
| TOTAL days = 16 | 2.8 (8-8) | 11.0 (8-31) |

SCOEPA00035006

9/2/81 0500

Dirk Dunning

Re: BOD Samples for 8/28/81

1) Process Sample 1 48
2 46
3 53.5
} Average BOD. = 49 mg/L

2) Organic Sample 1 105
2 82.5
3 95.0
} Average B.O.D. = 94 mg/L

3) Blank Initial - 8.5 mg/L
Final 8.5 mg/L

Dirk,

I titrated these this A.M. and w/ the exception of the middle dilution on the Organic sample they look O.K., although the Organic BOD appears lower than a few I glanced at in the log book. As for the initial + final B.O.D's being right on, I'd say this was just good Technique on Jeff's part when he set them up.

Francis

SCOEPA00035007

EFFICIENCY® LINE 22-213

MONTH: AUGUST
YEAR: 1981

Wastewater Report (Columns are in mg/L and Kg/Day respectively, $m^3$/Day, and pH units/ °C )

| | | Process Flow | BOD | | TSS | | $Cr^{6+}$ | | Cr | | $F^-$ | | MV#3 Flow | $PO_4^{\equiv}$ | CD pH/T | MV3 pH/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 337.2 | | | | | | | | | | | | | | |
| 2 | | 441.8 | | | | | | | | | | | | | | |
| 3 | | 979.9 | | | | | | | | | | | | | | |
| 4 | | 838.3 | | | | | | | | | | | | | | |
| 5 | | 822.0 | | | | | | | | | | | | | | |
| 6 | | 747.9 | | | | | | | | | | | | | | |
| 7 | K | 504.5 | 18 | 9.0 | 18 | 9.0 | 0.005 | ~~0.002~~ | 0.001 | — | 3.4 | 1.7 | | 0.2 | 7.3/26 | 6.1/24 |
| 8 | | 225.7 | | | | | | low sensitivity | | | | | | | | |
| 9 | | 341.4 | | | | | | | | | | | | | | |
| 10 | | 762.5 | | | | | | | | | | | | | | |
| 11 | | 917.4 | | | | | | | | | | | | | | |
| 12 | | 877.6 | | | | | | | | | | | | | | |
| 13 | | 929.3 | | | | | | | | | | | | | | |
| 14 | K | 779.8 | 33 | 25.7 | 18 | 14.0 | 0.006 | .005 | 0.007 | 0.005 | 3.6 | 2.8 | | 0.4 | 7.3/26 | 6.2/25 |
| 15 | | 238.6 | | | | | | | | | | | | | | |
| 16 | | 332.7 | | | | | | | | | | | | | | |
| 17 | | 698.9 | | | | | | | | | | | | | | |
| 18 | | 524.2 | | | | | | | | | | | | | | |
| 19 | | 467.5 | | | | | | | | | | | | | | |
| 20 | | 912.7 | | | | | | | | | | | | | | |
| 21 | K | 653.4 | 40 | 26.1 | 14 | 9.1 | 0.004 | 0.003 | 0.008 | 0.005 | 3.7 | 2.4 | | 1.6 | 7.1/24.6 | 6.2/23.2 |
| 22 | | 247.8 | | | | | | | | | | | | | | |
| 23 | | 405.4 | | | | | | | | | | | | | | |
| 24 | | 977.7 | | | | | | | | | | | | | | |
| 25 | | 885.4 | | | | | | | | | | | | | | |
| 26 | | 868.9 | | | | | | | | | | | | | | |
| 27 | | 777.4 | | | | | | | | | | | | | | |
| 28 | K | 413.6 | 41 ~~40.7~~ | 17.0 | ~~16.5~~ 15.5 | 6.6 | 0.02 | 0.008 | 0.04 | 0.017 | 7.3 | 3.0 | | 1.5 | 8.8/26.4 | 8.0/24.3 |
| 29 | | 370.2 | | | | | | | | | | | | | | |
| 30 | | 415.0 | | | | | | | | | | | | | | |
| 31 | | 725.0 | | | | | | | | | | | | | 7.1/8.8 | 6.1/8.0 |
| | | Ave. | 33.0 | 19.5 | 16.5 | 9.7 | 0.018 | 0.005 | 0.014 | 0.007 | 4.5 | 2.5 | | 0.9 | 26.4 | 25 |
| | | Min./Max. | 18/41 | 9.0/26.1 | 14/18 | 6.6/14.0 | 0.004/0.02 | 0.002/0.008 | 0.001/0.04 | 0/0.017 | 3.4/7.3 | 1.7/3.8 | | 0.2/1.6 | | |

SCOEPA00035008

WACKER

# WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

August 10, 1981

Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Attention: Mr. Stephen C. Carter

Dear Sir:

For your information, I have assembled a list of activities and observations for the month of July, 1981 related to the N.P.D.E.S. parameters:

FLUORIDE

The fluoride level continues to be stable and within limitations, (see Figure No. 1). The new fluoride ion monitor on the combined effluent provides good continuous base data and alerts the operator to any upset conditions.

BOD

To gain further BOD improvements, it is now imperative that an intensive drain labelling and employee training program be initiated throughout the process. All known physical changes for the improvement of BOD have now been made. Further improvements, if possible, must be accomplished through greater administrative efforts.

BOD spikes, such as indicated for 7/2 and 7/17, (see Figure 1), cannot be explained and may be caused by organic materials (such as soap) inadvertantly entering inorganic drains on an infrequent cycle.

TSS

For the most part, total suspended solids were much improved as compared to data for preceding months. Excluding the 7/17 sample data, the four remaining samples averaged approximately 11 PPM with a range of 8-13 PPM, (see Figure 1).

The clarifier conditions remain unstable, again primarily due to pH fluctuations. Second stage neutralization, as mentioned last month, remains in the engineering phase.

SCOEPA00035009

WACKER

If there are any questions, please call.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis

James R. Ellis
Facilities Manager

JE/kk

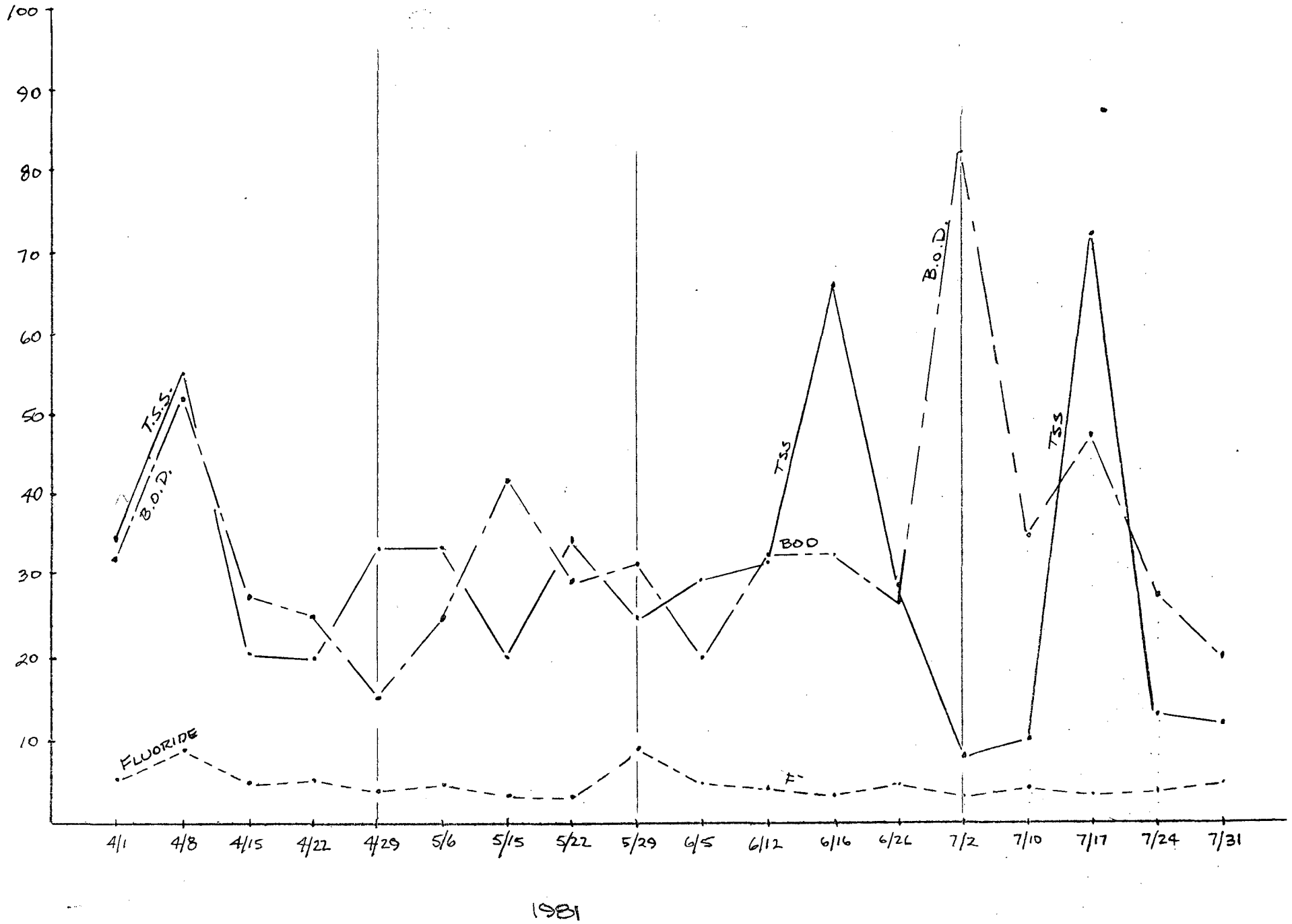
Attachment

cc: Beiswenger
Dunning
Pendleton
Pittman
Russ
File

6/15/81

# FIGURE NO. 1 – WACKER SILTRONIC CORP.

## N.P.D.E.S DISCHARGE PARAMETERS




1981

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR 0030558-9 | 016 |

2834-J
File No. 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 07 | 01 | TO | 81 | 07 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater FLOW | SAMPLE MEASUREMENT | 745 | 1131 | $m^3/d$ | — | — | — | — | 0 | DAILY | TOTAL RECORD. |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| BOD | SAMPLE MEASUREMENT | 36.7 | 74.6 | kg/d | ~~20~~ | 42 | 82. | mg/l | 5 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TSS | SAMPLE MEASUREMENT | 17.6 | 60.4 | kg/d | ~~8~~ | 23 | 72. | mg/l | 1 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.01 | 0.02 | kg/d | < | 0.01 | 0.02 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{TOTAL}$ | SAMPLE MEASUREMENT | 0.02 | 0.04 | kg/d | < | 0.02 | 0.04 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $F^-$ | SAMPLE MEASUREMENT | 3.1 | 3.8 | kg/d | 3.1 | 3.7 | 4.3 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 4.4 | — | 10.0 | pH UNITS | 16 | DAILY | CONT. |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| John Fitzgerald Director of Engineering | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE 503 | NUMBER 243-2020 | YEAR 81 | MO 07 | DAY 2. |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

See attached letter addressed to Mr. Stephen Carter dated August 10, 1981 regarding plant activities related to above parameters.



PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR 0030558-9 | 016 |

2834-J
File No. 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 07 | 01 | TO | 81 | 07 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling Water and Boiler Blowdown Total $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | 1.2 | 2.1 | 3.4 | mg/l | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| FLOW | SAMPLE MEASUREMENT | 610 | 836 | $m^3/d$ | — | — | — | — | 0 | DAILY | TOTAL RECORD. |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 7.1 | — | 7.8 | pH UNITS | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | | | | 6.0 | | 9.0 | | | | |
| TEMPERATURE | SAMPLE MEASUREMENT | — | — | — | — | — | 24 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| FREE AVAIL. CHLORINE. | SAMPLE MEASUREMENT | — | — | — | < | < | < | mg/l | 0 | during chlorin. | GRAB |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| John Fitzgerald Director of Engineering | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE 503 | NUMBER 243-2020 | YEAR 81 | MO 07 | DAY 12. |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*



SCOEPA00035012

EFFICIENCY® LINE 22-213

MONTH: JULY
YEAR: 1981

Wastewater Report (Columns are in mg/L and Kg/Day respectively, $m^3$/Day, and pH units/ $^oC$ )

| | | Process Flow | BOD | | TSS | | $Cr^{6+}$ | | Cr | | $F^-$ | | MV#3 Flow | $PO_4^{\equiv}$ | CD pH/T | MV3 pH/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 1045.0 | | | | | | | | | | | (773.2) | | | |
| 2 | * | 909.4 | 82 | 74.6 | 8 | 7.3 | <0.01 | ⊖ | <0.01 | ⊖ | 3.1 | 2.8 | (773.2) | 1.8 | 7.4/22.6 | 6.3/16.0 |
| 3 | | 105.1 | | | | | | | | | | | (556.3) | | | |
| 4 | | 18.0 | | | | | | | | | | | | | | |
| 5 | | 1.2 | | | | | | | | | | | | | | |
| 6 | | 724.4 | | | | | | | | | | | | | | |
| 7 | | 1003.1 | | | | | | | | | | | | | | |
| 8 | | 915.7 | | | | | | | | | | | | | | |
| 9 | | 969.7 | | | | | | | | | | | | | | |
| 10 | * | 807.1 | 34 | 27.4 | 10 | 8.1 | 0.01 | 0.01 | 0.02 | 0.02 | 4.0 | 3.2 | | 1.2 | 7.1/20.6 | 6.1/18.2 |
| 11 | | 305.6 | | | | | | | | | | | | | | |
| 12 | | 415.0 | | | | | | | | | | | | | | |
| 13 | | 1061.2 | | | | | | | | | | | | | | |
| 14 | | 1047.8 | | | | | | | | | | | | | | |
| 15 | | (1130.5) | | | | | | | | | | | | | | |
| 16 | | (1130.5) | | | | | | | | | | | | | | |
| 17 | * | 838.7 | 47 | 39.4 | 72 | 60.4 | 0.02 | 0.02 | 0.02 | 0.02 | 3.2 | 2.7 | (539.1) | 3.0 | 7.6/20.5 | 8.7/19.4 |
| 18 | | 352.4 | | | | | | | | | | | (539.1) | | | |
| 19 | | 517.2 | | | | | | | | | | | (539.1) | | | |
| 20 | | 1013.8 | | | | | | | | | | | 522.4 | | | |
| 21 | | 1014.9 | | | | | | | | | | | (631.0) | | | |
| 22 | | 989.8 | | | | | | | | | | | (631.0) | | | |
| 23 | | 1036.7 | | | | | | | | | | | (631.0) | | | |
| 24 | * | 1011.6 | 27 | 27.3 | 13 | 13.2 | 0.02 | 0.02 | 0.04 | 0.04 | 3.8 | 3.8 | 701.1 | 1.3 | 7.1/24 | 9.2/16 |
| 25 | | 533.9 | | | | | | | | | | | 835.5 | | | |
| 26 | | 416.5 | | | | | | | | | | | 596.6 | | | |
| 27 | | 764.1 | | | | | | | | | | | (733.2) | | | |
| 28 | | 874.9 | | | | | | | | | | | (733.2) | | | |
| 29 | | 667.2 | | | | | | | | | | | (733.2) | | | |
| 30 | | 715.7 | ⊖ | | | | | | | | | | (–) | | | |
| 31 | * | 737.7 | 20 | 14.7 | 12 | 8.9 | 0.003 | 0.002 | 0.006 | 0.004 | 4.3 | 3.2 | (–) | 3.4 | 7.8/24 | 7.6/22 |
| | Ave. | ~~30~~ 744.7 | 42 | 36.7 | 23 | 19.6 | 0.01 | 0.01 | 0.02 | 0.02 | 3.7 | 3.1 | 610.3 | 2.1 | 7.1/7.8 | 6.1/9.2 |
| | Min./Max. | 1.2/1130.5 | 27/82 | 14.7/74.6 | 10/72 | 7.3/60.4 | ⊖/0.02 | ⊖/0.02 | ⊖/0.04 | ⊖/0.04 | 3.1/4.3 | 2.8/3.8 | 522.4/835.5 | 1.2/3.4 | 7.0/24 | 16/22 |

SCOEPA00035013

MONTH JULY
YEAR 1981

# WASTEWATER FLOW SHEET.

| | NEUTRALIZED ORGANIC WASTE. | | COMBINED EFFLUENT | | METER VAULT (SANITARY) #2 | | METER VAULT #3 COOLING TOWER B/D. | | | | COMB. DISCH. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * TOTALIZER GAL X 0.1 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.1 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.01 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.01 | DAILY FLOW $m^3$ | pH | °C | pH | °C |
| 1 | 386915 | 251.9 | 668290 | 1045.0 | 123390 | (234.3) | 278290 | (773.2) | | | | |
| 2 | 393569 | 241.1 | 696195 | 909.4 | — | (234.3) | — | (773.2) | | | | |
| 3 | 399938 | 203.3 | 720219 | 105.1 | 124628 | (177.5) | 282375 | (556.3) | | | | |
| 4 | 405308 | 184.4 | 722995 | 18.0 | — | (177.5) | — | | | | | |
| 5 | 410180 | 210.0 | 723470 | 1.2 | — | (177.5) | — | | | | | |
| 6 | 415728 | 312.8 | 723502 | 724.4 | 12941 | (177.5) | 4 16243 | | | | | |
| 7 | 423991 | 268.0 | 742638 | 1003.1 | — | (177.5) | — | | | | | |
| 8 | 431070 | 323.7 | 769137 | 915.7 | — | (177.5) | — | | | | | |
| 9 | 439620 | 355.6 | 793327 | 969.7 | — | (177.5) | — | | | | | |
| 10 | 449015 | 333.5 | 818944 | 807.1 | — | (177.5) | — | | | | | |
| 11 | 457825 | 136.1 | 840265 | 305.6 | — | (177.5) | — | | | | | |
| 12 | 461420 | 209.7 | 848339 | 415.0 | 12893 | (177.5) | — | | | | | |
| 13 | 466960 | 384.9 | 859302 | 1061.2 | 129318 | (186.5) | 3296696 | | | | | |
| 14 | 477129 | 402.5 | 887335 | 1047.8 | — | (186.5) | — | | | | | |
| 15 | 487763 | 388.5 | 915016 | (1130.5) | — | (186.5) | — | | | | | |
| 16 | 498025 | 349.7 | 945572 | (1130.5) | — | (186.5) | — | | | | | |
| 17 | 507264 | 234.5 | 974743 | 838.7 | 131289 | (188.1) | 302948 | (539.1) | | | | |
| 18 | 513460 | 96.5 | 996900 | 352.4 | — | (188.1) | — | (539.1) | | | | |
| 19 | 516008 | 138.1 | 006209 | 517.2 | — | (188.1) | — | (539.1) | | | | |
| 20 | 519657 | 353.2 | 019872 | 1013.8 | 132780 | 147.3 | 307220 | 522.4 | | | | |
| 21 | 528987 | 310.2 | 046654 | 1014.9 | 133169 | (195.6) | 308600 | (631.0) | | | | |
| 22 | 537182 | 334.6 | 073465 | 989.8 | — | (195.6) | — | (631.0) | | | | |
| 23 | 546020 | 450.2 | 099613 | 1036.7 | — | (195.6) | — | (631.0) | | | | |
| 24 | 557913 | 389.3 | 127000 | 1011.6 | 134719 | 216.5 | 313601 | 701.1 | | | | |
| 25 | 568197 | 300.6 | 153724 | 5339 | 135291 | 203.7 | 315453 | 835.5 | | | | |
| 26 | 576137 | 221.0 | 167828 | 416.5 | 135829 | 132.9 | 317660 | 596.6 | | | | |
| 27 | 581974 | 286.1 | 178832 | 764.1 | 136180 | (220.8) | 319236 | (733.2) | | | | |
| 28 | 589533 | 426.2 | 199016 | 874.9 | — | (220.8) | — | (733.2) | | | | |
| 29 | 600792 | 491.8 | 222128 | 667.2 | — | (220.8) | — | (733.2) | | | | |
| 30 | 613785 | 109.3 | 239753 | 715.7 | 137930 | (—) | 325047 | (—) | | | | |
| 31 | 616673 | 788.2 | 258659 | 737.7 | — | (—) | — | (—) | | | | |
| 1 | 637495 | X | 278146 | X | — | X | — | X | | | | |
| MAX | | 491.8 | | 1130.5 | | 234.3 | | 835.5 | | | | |
| AVE | Δ/26.417 | 306.0 | Δ/26.417 | 744.7 | Δ/26.417 | 189.8 | Δ/2.6417 | 610.3 | | | | |
| MIN | | 96.5 | | 1.2 | | 132.9 | | 522.4 | | | | |

COMMENTS — X — All 8:00 A.M. READINGS.

SCOEPA00035014

EFFICIENCY® LINE 22-213

MONTH: ~~[illegible]~~ JUNE
YEAR: 1981

Wastewater Report (Columns are in mg/L and Kg/Day respectively, $m^3$/Day, and pH units/ $^{o}C$ )

| | Process Flow | BOD | | TSS | | $Cr^{6+}$ | | Cr | | $F^-$ | | MV#3 Flow | $PO_4^{\equiv}$ | CD pH/T | MV3 pH/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | 650.0 | 20 | 13.0 | 29 | 18.9 | <0.001 | <0.001 | 0.001 | <0.001 | 4.9 | 3.2 | | 1.3 | 6.7/21.3 | 6.9/18.5 |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | 731.8 | 32 | 23.4 | 31 | 22.7 | 0.001 | <0.001 | 0.005 | 0.004 | 4.0 | 2.9 | | 0.7 | 6.7/21.0 | 6.2/15.2 |
| 13 | | DEQ #'s | | | | | | | | | | | | | |
| 14 | averaged → | 44 | ( ) | 55 | ( ) | 0.005 | | 0.005 | ( ) | 3.6 | ( ) | | 0.48 | | |
| 15 | | | | DEQ | SPLIT | SAMPLE - NOT | | FULL 24HR | COMPOSITE | | | | | | |
| 16 | 919.6 | 32 | (34.9) | 66 | 55.6 | 0.001 | 0.001 | 0.004 | (0.004) | 3.6 | (3.3) | | 1.6 | 6.1 → | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | 809.7 | 34 | 27.5 | 17 | 13.8 | <0.001 | <0.001 | 0.006 | 0.005 | 4.0 | 3.2 | | 0.6 | 7.6/23.2 | 5.9/16.2 |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | |
| 26 | 563.6 | 26 | 14.7 | 28 | 15.8 | 0.001 | <0.001 | 0.009 | 0.005 | 4.5 | 2.5 | | 6.9 | ~~7.8/23.2~~ 7.8/16.0 | |
| 27 | | | | | | | | | | | | | | missed sample hole plugged up! | |
| 28 | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | |
| | Ave. 745.2 | 30 | 22.7 | 33.1* | 25.4 | 0.001 | 0 | 0.005 | 0.004 | 4.2 | 3.0 | | 2.0 | | |
| | Min./Max. 266.7/1099.1 | 20/38* | 13.0/34.9* | 17/60.5* | 13.8/55.6* | 0/0.001 | 0/0.001 | 0.001/0.009 | 0/0.005 | 3.6/4.9 | 2.5/3.3* | | 0.7/6.9 | | |

SCOEPA00035015

MONTH June
YEAR 1981

# WASTEWATER FLOW SHEET.

| | NEUTRALIZED ORGANIC WASTE. | | COMBINED EFFLUENT | | METER VAULT (SANITARY) #2 | | METER VAULT #3 COOLING TOWER B/D. | | | | COMB. DISCH. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * TOTALIZER GAL x 0.1 | DAILY FLOW m³ | * TOTALIZER GAL x 0.1 | DAILY FLOW m³ | * TOTALIZER GAL x 0.01 | DAILY FLOW m³ | * TOTALIZER GAL x 0.01 | DAILY FLOW m³ | pH | °C | pH | °C |
| 1 | 231372 | | ~~063832~~ | 1057.3 | 109234 | | 233422 | 610.6 | | | | |
| 2 | 237589 | | 077730 | 642.1 | 109672 | | 235035 | 610.6 | | | | |
| 3 | 243832 | | 105660 | 720.3 | 110068 | | 236648 | 558.4 | | | | |
| 4 | 250541 | | 122623 | 908.7 | 110534 | | 238123 | (513.4) | | | | |
| 5 | 257071 | | 141651 | 650.0 | 111017 | | — | (513.4) | | | | |
| | | | | | | | | | | | | |
| 6 | 261641 | | 165656 | 193.9 | 111469 | | — | (513.4) | | | | |
| 7 | 263413 | | 182828 | 423.3 | 112017 | | — | (513.4) | | | | |
| 8 | 266277 | | 187951 | 1099.1 | — | | — | (513.4) | | | | |
| 9 | 273449 | | 199133 | 984.9 | 112807 | | — | (513.4) | | | | |
| 10 | 279449 | | 228169 | 1057.5 | — | | — | (513.4) | | | | |
| | | | 254187 | | | | | | | | | |
| 11 | 285746 | | 282125 | 999.8 | 113804 | | — | (513.4) | | | | |
| 12 | 291830 | | 308537 | 731.8 | 114298 | | — | (513.4) | | | | |
| 13 | 296508 | | 327870 | 299.9 | — | | — | (513.4) | | | | |
| 14 | 299373 | | 335792 | 430.3 | — | | — | (513.4) | | | | |
| 15 | 303196 | | 347160 | 964.5 | 115568 | | — | (513.4) | | | | |
| | | | | | | | | | | | | |
| 16 | 310786 | | 372638 | 919.6 | 116261 | | 254399 | 651.5 | | | | |
| 17 | 317021 | | 396931 | 1008.6 | 116633 | | 256120 | 435.3 | | | | |
| 18 | 324214 | | 423575 | 984.3 | 117145 | | 257270 | 606.0 | | | | |
| 19 | 331676 | | 449577 | 809.7 | 117695 | | 258871 | 655.3 | | | | |
| 20 | 336169 | | 470967 | 367.9 | 118159 | | 260602 | 611.0 | | | | |
| | | | | | | | | | | | | |
| 21 | 337515 | | 480686 | 409.8 | 118590 | | 262216 | 424.7 | | | | |
| 22 | 340649 | | 491511 | 966.3 | — | | 263338 | (543.4) | | | | |
| 23 | 347329 | | 517039 | 1013.1 | 119497 | | — | (543.4) | | | | |
| 24 | 353780 | | 543802 | 967.2 | 120084 | | 266209 | 699.5 | | | | |
| 25 | 359481 | | 569353 | 715.4 | 120559 | | 268057 | 1141.3 | | | | |
| | | | | | | | | | | | | |
| 26 | 365199 | | 588251 | 563.6 | 121065 | | 271072 | 467.5 | | | | |
| 27 | 369096 | | 603139 | 266.7 | 121488 | | 272307 | (520.9) | | | | |
| 28 | 371028 | | 610184 | 478.7 | — | | — | (520.9) | | | | |
| 29 | 374557 | | 622829 | 975.1 | 122398 | | 275059 | (21.4) | | | | |
| 30 | 380264 | | 648588 | ~~[illegible]~~ 745.8 | — | | — | (21.4) | | | | |
| | | | | | | | | | | | | |
| 31 | N/A | | N/A | ~~[illegible]~~ | N/A | | N/A | | | | | |
| 1 | 386915 | | 668290 | ~~[illegible]~~ | 123390 | | 278290 | | | | | |
| MAX | | | | 1099.1 | | | | 1141.3 | | | | |
| AVE | Δ/26.417 | | Δ/26.417 | 745.2 | Δ/26.417 | | Δ/2.6417 | 566.2 | | | | |
| MIN | | | | 266.7 | | | | 21.4 | | | | |

$G_{n-1} = 276.4$

COMMENTS —

* — All 8:00 A.M. READINGS.

SCOEPA00035016

pH VIOLATION DAYS.

WACKER

# WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

July 17, 1981

Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Attention: Mr. Stephen C. Carter

Dear Sir:

For your information, I have assembled a list of activities for the month of June, 1981 related to the N.P.D.E.S. parameters:

Fluoride

The fluoride level continues to be stable at a satisfactory level, (see Figure No. 1). The continuous fluoride monitor on the combined effluent stream is now operational and functioning well. This additional data has been valuable in optimizing the calcium ion level in the clarifier.

BOD

As previously mentioned, improvements in BOD level are becoming more and more difficult to obtain; however, we are continuing to make changes in an attempt to reduce BOD level in the silicon solids and weak acid waste streams.

Most recently the common vent on a series of separate drains off a cleaning machine has been modified so that each drain has its own vent. This change would eliminate any cross-contamination through the common vent system.

TSS

Continued tests with the new anionic polymer indicate that it will not perform in the environment of the clarifier as well as in the jar tests. Facilities engineering is now investigating the feasibility of installing second stage neutralization to stabilize the pH in the clarifier and improve TSS in the effluent. Much of our TSS problem results from clarifier upsets. This may also significantly improve combined effluent pH stability.

SCOEPA00035018

If there are any questions, please call.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis
Facilities Manager

JE/kk

Attachment

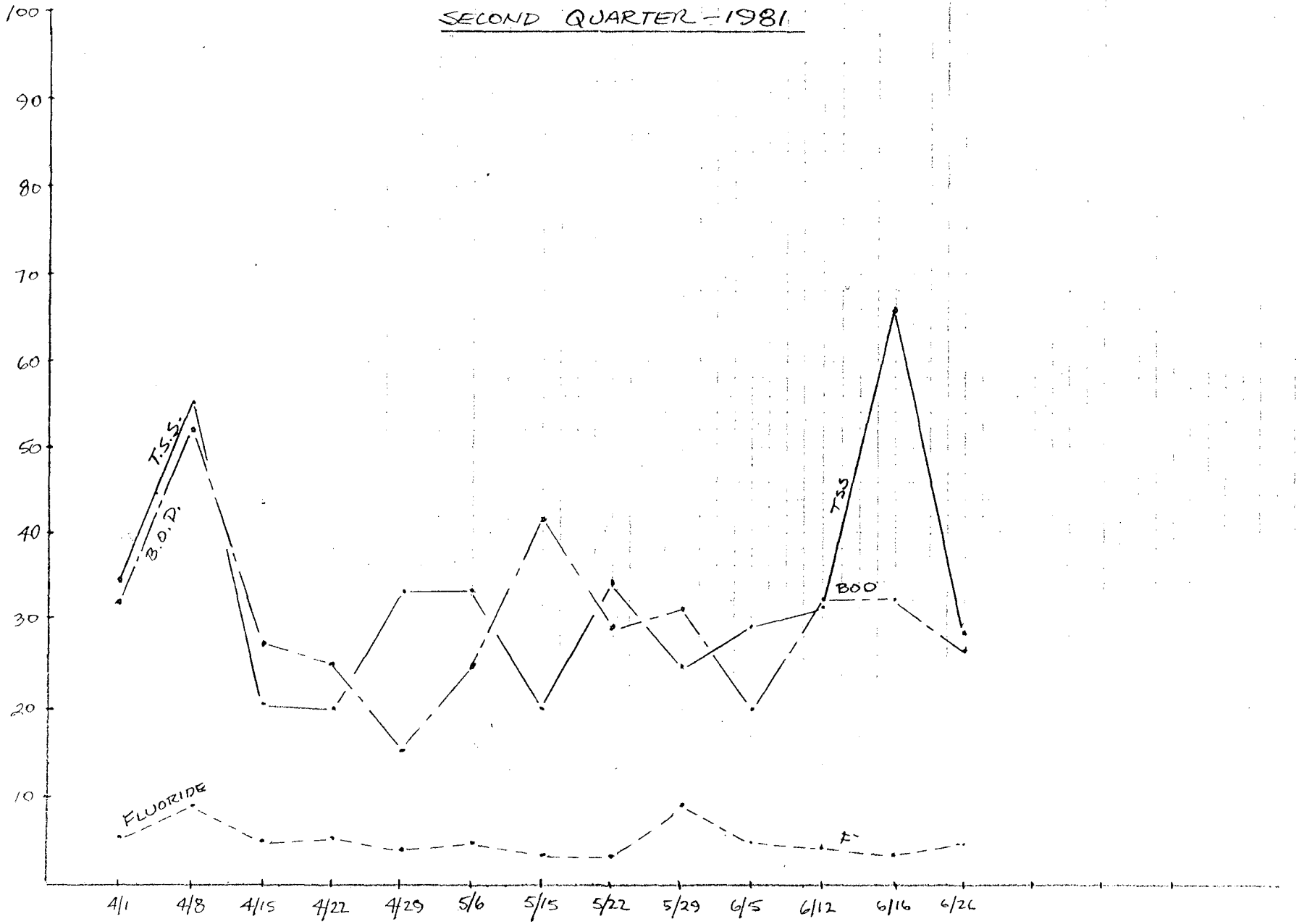
cc: Steve Beiswenger
Dirk Dunning
Gary Pendleton
John Pittman
Mal Russ
File

6/15/81

# FIGURE NO. 1 – WACKER SILTRONIC CORP.

## N.P.D.E.S DISCHARGE PARAMETERS

## SECOND QUARTER – 1981




SCOEPA00035020

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if different)

NAME: WACKER SILTRONIC CORP.
ADDRESS: P.O. BOX 03180
PORTLAND, ORE. 97203
FACILITY: HYPER-PURE SILICON PLANT
LOCATION: 7200 N.W. FRONT AVE. PORTLAND, ORE. 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158-R0073

(2-16) PERMIT NUMBER: OR 0003051-9
(17-19) DISCHARGE NUMBER: 015

2834-J
File # 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 06 | 01 | TO | 81 | 06 | 30 |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROCESS WASTEWATER FLOW | SAMPLE MEASUREMENT | 745.2 | 1099.1 | $m^3/d$ | — | — | — | — | — | CONT | CONT |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | CONT | CONT |
| BOD | SAMPLE MEASUREMENT | ~~30~~ 22.7 | ~~30.8~~ 34.9 ① | kg/d | 20 | 30 | 38 ① | mg/l | 2 | ~~WEEKLY~~ 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | ~~WEEKLY~~ 1/7 | 24HC |
| TSS | SAMPLE MEASUREMENT | 25.4 | 55.6 ① | kg/d | 17 | 33.1 | 60.5 ① | mg/l | 2 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24HC |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | ~~0~~ | 0.001 | kg/d | ~~0~~ | 0.001 | 0.001 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.01 | 0.05 | | — | 0.02 | 0.05 | | 0 | 1/7 | 24HC |
| $Cr^{total}$ | SAMPLE MEASUREMENT | 0.004 | 0.005 | kg/d | 0.001 | 0.005 | 0.009 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.2 | 0.5 | | — | 0.3 | 1.0 | | 0 | 1/7 | 24HC |
| $F^-$ | SAMPLE MEASUREMENT | 3.0 | 3.3 ① | kg/d | 3.6 | 4.2 | 4.9 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | ~~0~~ 4.5 | 9.1 | | — | 6 | 20 | | 0 | 1/7 | 24HC |
| pH | SAMPLE MEASUREMENT | — | — | — | 5.0 | — | 10.4 | pH | 9 | CONT | CONT |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | UNITS | 0 | CONT | CONT |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
JOHN PITTMAN
DIR OF ENG.
TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

John Pittman
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 503 | NUMBER 243-2020

DATE: YEAR 81 | MO 07 | DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

① D.E.Q. SPLIT SAMPLE AVERAGED WITH WACKER SAMPLE.

See attached letter addressed to Mr. Stephen Carter dated 7/16/81, regarding plant activities related to above parameters.



SCOEPA00035021

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if different)

NAME WACKER SILTRONIC CORP.
ADDRESS P.O. BOX 03180
PORTLAND, ORE. 97203
HYPER-PURE SILICON PLANT
FACILITY 7200 N.W. FRONT AVE.
LOCATION PORTLAND, ORE. 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158-R0073

(2-16) PERMIT NUMBER: OR 00309 -9
(17-19) DISCHARGE NUMBER: 015

2834-J
File # 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 06 | 01 | TO | 81 | 06 | 30 |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE | MAXIMUM | UNITS | (4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM | AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COOLING WATER & BOILER BLOWDOWN FLOW | SAMPLE MEASUREMENT | 566.2 | 1141.3 | $m^3/d$ | — | — | — | — | — | 1/7 | RECORD |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | 1/7 | RECORD |
| TOTAL $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | 0.7 | 2.0 | 6.9 (2) | mg/l | 1 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | 0 | 1/7 | GRAB |
| — | SAMPLE MEASUREMENT | — | — | | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | — | — | — | — | | — | — | — |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | | 6.1 | — | 7.6 | pH UNITS | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | — | 6.0 | — | 9.0 | | 0 | 1/7 | GRAB |
| TEMPERATURE | SAMPLE MEASUREMENT | — | — | | — | — | 23.2 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | — | — | — | 27 | | 0 | 1/7 | GRAB |
| FREE AVAIL. CHLORINE | SAMPLE MEASUREMENT | — | — | | ⊖ | ⊖ | ⊖ | mg/l | 0 | DURING CHLOR. | GRAB |
| | PERMIT REQUIREMENT | — | — | — | — | 0.2 | 0.5 | | 0 | DURING CHLOR. | GRAB |
| — | SAMPLE MEASUREMENT | — | — | | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | — | — | — | — | | — | — | — |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
JOHN PITTMAN
DIR OF ENG
TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

John Pittman
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 503 NUMBER 243-2020

DATE: YEAR 81 MO 08 DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

(2) SUSPECT CONTAMINATED SAMPLE. — VERY LOW FLOW CONDITION IN METER VAULT — NOT REPRESENTATIVE.



SCOEPA00035022

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OK 0003058-9 | 015 |

2834-J

File # 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |
| FROM | 81 | 06 | 01 | TO | 81 | 06 | 30 |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROCESS WASTEWATER FLOW | SAMPLE MEASUREMENT | 745.2 | 1099.1 | $m^3/d$ | — | — | — | — | — | CONT | CONT |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| BOD | SAMPLE MEASUREMENT | ~~30~~ 22.1 | ~~30~~ 38 (1) | kg/d | 2.0 | 3.0 | ~~38~~ 38 (1) | mg/l | 2 | 1/7 weekly | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TSS | SAMPLE MEASUREMENT | 25.4 | 55.6 (1) | kg/d | 17 | 33.1 | 60.5 (1) | mg/l | 2 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | ~~0~~ | 0.001 | kg/d | ~~0~~ | 0.001 | 0.001 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{total}$ | SAMPLE MEASUREMENT | 0.004 | 0.005 | kg/d | 0.001 | 0.005 | 0.009 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $F^-$ | SAMPLE MEASUREMENT | 3.0 | 3.3 (1) | kg/d | 3.6 | 4.2 | 4.9 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 5.0 | — | 10.4 | pH UNITS | 9 | CONT | CONT |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DAY |
| | | | 503 | 243-2020 | 81 | 08 | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

(1) D.S.D. SPLIT SAMPLE ANALYZED WITH WACKER SAMPLE.

See attached letter, received by Mr. Stephen Sanders, dated 7/31/81, regarding plant activities related to above parameters.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 1 OF 2

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OK 0003058-9 | 015 |

2834-J

File # 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |
| FROM | 81 | 06 | 01 | TO | 81 | 06 | 30 |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COOLING WATER & BOILER BLOWDOWN FLOW | SAMPLE MEASUREMENT | 566.2 | 1141.3 | $m^3/d$ | — | — | — | — | — | 1/7 | 24HRD |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TOTAL $PO_4$ | SAMPLE MEASUREMENT | — | — | — | 0.7 | 2.0 | 6.9 (2) | mg/l | 1 | 1/7 | 6RMB |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 6.1 | — | 7.6 | pH UNITS | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TEMPERATURE | SAMPLE MEASUREMENT | — | — | — | — | — | 23.2 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| FREE AVAIL. CHLORINE | SAMPLE MEASUREMENT | — | — | — | ~~0~~ | ~~0~~ | ~~0~~ | mg/l | 0 | DURING CHLOR. | GRAB |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DAY |
| | | | 503 | 243-2020 | 81 | 08 | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

(2) SUSPECT CONTAMINATED SAMPLE — VERY LOW FLOW CONDITION IN METER VAULT — NOT REPRESENTATIVE.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 2 OF 2

SCOEPA00035023

EFFICIENCY® LINE 22-213

MONTH: MAY
YEAR: 1981

Wastewater Report (Columns are in mg/L and Kg/Day respectively, $m^3$/Day, and pH units/ $^oC$ )

| | | Process Flow | BOD | | TSS | | $Cr^{6+}$ | | Cr | | $F^-$ | | MV#3 Flow | $PO_4^{\equiv}$ | CD pH/T | MV3 pH/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | F | 755.9 | | | | | | | | | | | | | | |
| 2 | S | 247.5 | | | | | | | | | | | | | | |
| 3 | S | 449.1 | | | | | | | | | | | | | | |
| 4 | M | 1196.2 | | | | | | | | | | | | | | |
| 5 | T | 906.5 | | | | | | | | | | | | | | |
| * 6 | W | 1109.5 | 25 | 27.7 | 33 | 36.6 | 0.002 | .002 | 0.003 | .003 | 4.3 | 4.7 | | 1.6 | 6.9/18.3 | 6.2/13.0 |
| 7 | T | 925.5 | | | | | | | | | | | | | | |
| 8 | F | 482.9 | | | | | | | | | | | | | | |
| 9 | S | 142.7 | | | | | | | | | | | | | | |
| 10 | S | 411.9 | | | | | | | | | | | | | | |
| 11 | M | 991.8 | | | | | | | | | | | | | | |
| 12 | T | 967.7 | | | | | | | | | | | | | | |
| 13 | W | 991.4 | | | | | | | | | | | | | | |
| 14 | T | 969.3 | | | | | | | | | | | | | | |
| * 15 | F | 595.8 | 42 | 25.0 | 20 | 11.9 | 0.003 | .002 | 0.006 | .004 | 3.4 | 2.0 | | 0.2 | 7.3/19.4 | 5.7/13.0 |
| 16 | S | 136.1 | | | | | | | | | | | | | | |
| 17 | S | 287.6 | | | | | | | | | | | | | | |
| 18 | M | 1096.8 | | | | | | | | | | | | | | |
| 19 | T | 772.6 | | | | | | | | | | | | | | |
| 20 | W | 1055.2 | | | | | | | | | | | | | | |
| 21 | T | 916.3 | | | | | | | | | | | | | | |
| * 22 | F | 636.8 | 24 | 18.5 | 34 | 21.7 | 0.001 | 0.001 | 0.004 | 0.003 | 3.4 | 2.2 | NO GUTS | 1.0 | 7.3/21.2 | 8.8/14.5 |
| 23 | S | 187.9 | | | | | | | | | | | | | | |
| 24 | S | 162.8 | | | | | | | | | | | | | | |
| 25 | M | 558.3 | | | | | | | | | | | NOT PUMPABLE | | | |
| 26 | T | 785.1 | | | | | | | | | | | | | | |
| 27 | W | 964.1 | | | | | | | | | | | | | | |
| 28 | T | 976.9 | | | | | | | | | | | | | | |
| * 29 | F | 686.4 | 31 | 21.3 | 25 | 17.2 | 0.001 | 0.001 | 0.005 | 0.003 | 9.5 | 6.5 | | 2.8 | 6.8/21.6 | 6.5/19.5 |
| 30 | S | 261.4 | | | | | | | | | | | 514.8 | | | |
| 31 | S | 526.1 | | | | | | | | | | | 474.3 | | | |
| | Ave. | 682.4 | 30. | 23.1 | 28.0 | 21.8 | 0.002 | 0.001 | 0.005 | 0.003 | 5.3 | 3.9 | 494.6 | 1.4 | 6.8/17.3 | 5.7/8.8 |
| | Min./Max. | 136.1/1196.2 | 24/42 | 18.5/27.7 | 20/34 | 11.9/36.6 | 0.001/0.003 | 0.001/0.002 | 0.006/0.003 | 0.003/0.004 | 3.4/9.5 | 2.0/6.5 | 474.3/514.8 | 0.2/2.8 | 21.6 | 19.5 |

SCOEPA00035024

pH violation days.

| | min | max |
|---|---|---|
| 4/25 | — | 9.7 |
| 4/20 | 5.2 | — |
| 4/19 | — | 9.8 |
| 4/13 | — | 9.3 |
| 4/4 | 5.0 | — |
| 4/1 | 3.8 | — |
| 6 days | 3.8 | 9.8 |

MONTH MAY
YEAR 1981

# WASTEWATER FLOW SHEET.

| | NEUTRALIZED ORGANIC WASTE. | | COMBINED EFFLUENT | | METER VAULT (SANITARY) #2 | | METER VAULT #3 COOLING TOWER B/D. | | | | COMB. DISCH. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * TOTALIZER GAL X 0.1 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.1 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.01 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.01 | DAILY FLOW $m^3$ | pH | °C | pH | °C |
| 1 | 136931 | | 518907 | 755.9 | — | — | — | | | | | |
| 2 | 140064 | | 538875 | 247.5 | 96996 | — | — | | | | | |
| 3 | 141822 | | 545412 | 449.1 | 97347 | 132.9 | — | | | | | |
| 4 | 144045 | | 557277 | 1196.2 | 97692 | 130.6 | — | | | | | |
| 5 | 148818 | | 588878 | 906.5 | — | (164.5) | — | | | | | |
| 6 | 152811 | | 612824 | 1109.5 | — | (164.5) | — | | 6.2 | 13.0 | 6.9 | 18.3 |
| 7 | 159106 | | 642134 | 925.5 | 98996 | ~~(164.5)~~ | — | | | | | |
| 8 | 163146 | | 666582 | 482.9 | 99407 | 155.6 | — | | | | | |
| 9 | 165984 | | 679338 | 142.7 | 99908 | 189.7 | — | | | | | |
| 10 | 167144 | | 683108 | 411.9 | 100290 | 140.8 | — | | | | | |
| 11 | 170081 | | 693988 | 991.8 | 100819 | 200.2 | — | | | | | |
| 12 | 172710 | | 720189 | 967.7 | 101114 | 111.7 | — | | | | | |
| 13 | 176215 | | 745753 | 991.4 | 15 | — | — | | | | | |
| 14 | 179778 | | 771944 | 969.3 | 30 | — | — | | | | | |
| 15 | 183444 | | 797550 | 595.8 | 30 | — | — | | 5.7 | 13.0 | 7.3 | 19.4 |
| 16 | 185606 | | 813289 | 136.1 | 25 | — | — | | | | | |
| 17 | 186607 | | 816885 | 287.6 | 30 | — | — | | | | | |
| 18 | 188003 | | 824483 | 1096.8 | — | — | — | | | | | |
| 19 | 192183 | | 853457 | 772.6 | — | — | — | | | | | |
| 20 | 195552 | | 873867 | 1055.2 | 30 | — | — | | | | | |
| 21 | 199477 | | 901741 | 916.3 | 35 | — | — | | | | | |
| 22 | 202880 | | 925948 | 636.8 | 35 | — | — | | 8.8 | 14.5 | 7.3 | 21.2 |
| 23 | 205567 | | 942771 | 187.9 | 30 | — | — | | | | | |
| 24 | 206222 | | 947736 | 162.8 | 20+ | — | — | | | | | |
| 25 | 207125 | | 952038 | 558.3 | 106394 | 153.7 | — | | | | | |
| 26 | 209769 | | 966787 | 785.1 | 106800 | ~~232.8~~ 146.1 | — | | | | | |
| 27 | 213445 | | 987526 | 964.1 | 107145 | 184.4 | — | | | | | |
| 28 | 217397 | | 012995 | 976.9 | 107632 | ~~146.1~~ 164.3 | — | | | | | |
| 29 | 221501 | | 038803 | 686.4 | 108018 | ~~310.4~~ | — | | 6.5 | 19.5 | 6.8 | 21.6 |
| 30 | 225443 | | 056935 | 261.1 | 108452 | 168.3 | 230809 | 514.8 | | | | |
| 31 | 227734 | | 063832 | 526.1 | 108886 | 131.7 | 232169 | 474.3 | | | | |
| 1 | 231372 | | 077730 | — | 109234 | | 233422 | — | | | | |
| MAX | | | | 1196.2 | | 232.8 | | 514.8 | 8.8 | 19.5 | 7.3 | 21.6 |
| AVE | Δ/26.417 | 115.32 | Δ/26.417 | 682.4 | Δ/26.417 | 154.4 | Δ/2.6417 | 494.6 | | | | |
| MIN | | | | ~~142.7~~ 136.1 | | 111.7 | | 474.3 | 5.7 | | 6.8 | |

COMMENTS —

* — All 8:00 A.M. READINGS.

SCOEPA00035026

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR 0003095-9 | 014 |

7834.5
File # 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 05 | 01 | TO | 81 | 05 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING AVERAGE (46-53) | QUANTITY OR LOADING MAXIMUM (54-61) | UNITS | (4 Card Only) QUALITY OR CONCENTRATION MINIMUM (38-45) | QUALITY OR CONCENTRATION AVERAGE (46-53) | QUALITY OR CONCENTRATION MAXIMUM (54-61) | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROCESS WASTEWATER FLOW | SAMPLE MEASUREMENT | 682.4 | 1196.2 | $m^3/d$ | — | — | — | — | — | DAILY | TOTAL RECORD |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| BOD | SAMPLE MEASUREMENT | 23.1 | ~~23.1~~ 27.7 | kg/d | 24 | 30 | 42 | mg/l | 3 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TSS | SAMPLE MEASUREMENT | 21.8 | 36.6 | kg/d | 20 | 28 | 34 | mg/l | 2 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.001 | 0.002 | kg/d | 0.001 | 0.001 | 0.002 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{total}$ | SAMPLE MEASUREMENT | 0.003 | 0.004 | kg/d | 0.003 | 0.005 | 0.006 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $F^-$ | SAMPLE MEASUREMENT | 3.9 | 6.5 | kg/d | 3.4 | 5.3 | 9.5 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| PH | SAMPLE MEASUREMENT | — | — | — | 3.8 | — | 9.8 | PH UNITS | 6 | DAILY | GRAB |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| LEO FITTMAN<br>DIRECTOR OF ENVIR. C<br>TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DAY |
| | | | 503 | 243-2020 | 81 | 06 | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

See attached letter addressed to Mr. Stephen Conlan, dated 6/23/81, regarding plant activities including chlorine parameters.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 1 OF 2

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR 0003095-9 | 014 |

7834.5
File # 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 05 | 01 | TO | 81 | 05 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING AVERAGE (46-53) | QUANTITY OR LOADING MAXIMUM (54-61) | UNITS | (4 Card Only) QUALITY OR CONCENTRATION MINIMUM (38-45) | QUALITY OR CONCENTRATION AVERAGE (46-53) | QUALITY OR CONCENTRATION MAXIMUM (54-61) | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COOLING WATER AND BOILER BLOWDOWN TOTAL $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | 0.2 | 1.4 | 2.8 | mg/l | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| FLOW | SAMPLE MEASUREMENT | 494.6 (1) | 514.8 (1) | $m^3/d$ | — | — | — | — | 0 | DAILY | RECORD |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| COMBINED OUTFALL PH | SAMPLE MEASUREMENT | — | — | — | 6.8 | — | 7.3 | PH UNITS | 0 | 1/7 | grab |
| | PERMIT REQUIREMENT | | | | 6.0 | | 9.0 | | | | |
| Temperature | SAMPLE MEASUREMENT | — | — | — | — | — | 21.6 | °C | 0 | 1/7 | grab |
| | PERMIT REQUIREMENT | | | | | | 27 | | | | |
| Free Available Chlorine | SAMPLE MEASUREMENT | — | — | — | 0 | 0 | 0 | mg/l | 0 | during chlorination | grab |
| | PERMIT REQUIREMENT | | | | | 0.2 | 0.5 | | 0 | | |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| LEO FITTMAN<br>DIRECTOR OF ENVIR. C<br>TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DAY |
| | | | 503 | 243-2020 | 81 | 06 | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

(1) Meter restricted to operating conditions; limited data.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 2 OF 2

SCOEPA00035027

WACKER

WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

June 13, 1981

Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Attention: Mr. Stephen C. Carter

Dear Sir:

For your information, I have assembled a list of activities for the month of May, 1981 related to the N.P.D.E.S. parameters:

Fluoride

No significant change in activity as stated last month, except we have experienced start-up problems with new fluoride monitor. We now expect to have monitor functional during July.

BOD

B.O.D. levels continue to improve but gains are not as substantial as during the earlier months of the year (see attached Figure No. 1). We are now looking into the possibility of cross-contamination of process drains due to the use of common vents. We have found one machine where four separate drain systems utilize one commom vent. Depending on the degree of hydraulic loading, it is conceivable that wastes could back up through the vent system and discharge through an improper drain. This vent system will be modified during the week of June 15.

WACKER

TSS

We have now completed our evaluation of various vendors' polymers by conducting extensive jar testing. These jar test indicated that a Betz anionic polymer is by far the most effective flocculant; however, to date, we have not been able to duplicate this performance in the clarifier. If the proper conditions for this polymer can be found, it could significantly improve the level of TSS in the clarifier effluent.

We are now ready to ask for approval to install the PVDF "metering tank" as mentioned in last month's report in attempt to greater pH stability in the clarifier.

Please call me if you desire additional information regarding the above.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis

James R. Ellis
Facilities Manager

Attachment

cc: Steve Beiswenger
Dirk Dunning
John Pittman
Mal Russ
Fred Wale
File

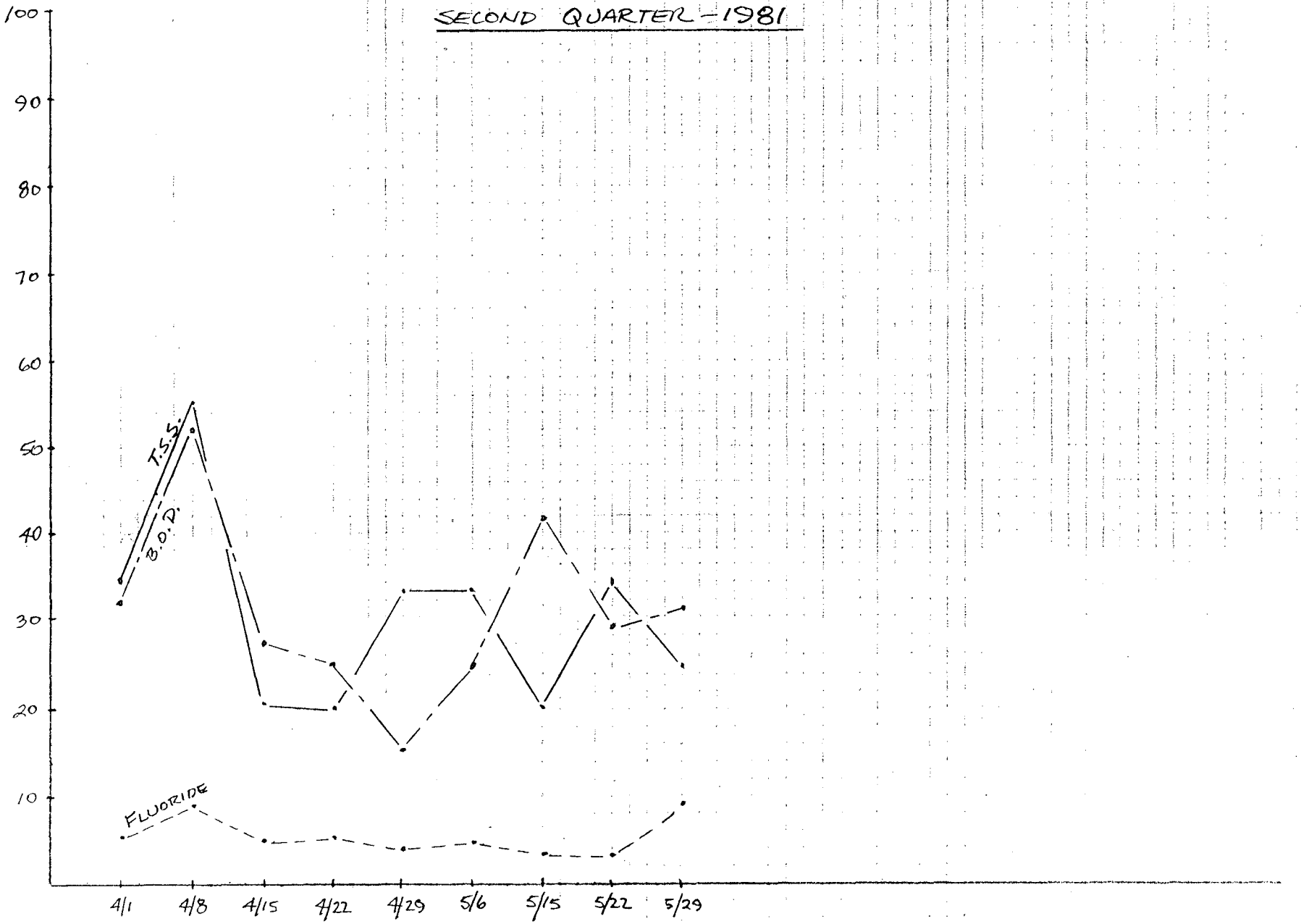
JR/md

FIGURE NO. 1 – WACKER SILTRONIC CORP.

N.P.D.E.S DISCHARGE PARAMETERS

SECOND QUARTER – 1981

6/15/81




SCOEPA00035030

MONTH APRIL
YEAR 1981

# WASTEWATER FLOW SHEET.

| | NEUTRALIZED ORGANIC WASTE. | | COMBINED EFFLUENT | | METER VAULT (SANITARY) #2 | | METER VAULT #3 COOLING TOWER B/D. | | | | COMB. DISCH. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * TOTALIZER GAL X 0.1 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.1 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.01 | DAILY FLOW $m^3$ | * TOTALIZER GAL X 0.01 | DAILY FLOW $m^3$ | pH | °C | pH | °C |
| 1 | 60907 | 95.1 | 897651 | 1294.2 | 85832 | (115.8) | — | | | | | |
| 2 | 63418 | 82.7 | 931841 | 1122.3 | — | (115.8) | — | | | | | |
| 3 | 65602 | 67.0 | 961489 | 802.5 | 86444 | 89.0 | — | | | | | |
| 4 | 67373 | 18.6 | 982689 | 182.9 | 86679 | 109.0 | — | | | | | |
| 5 | 67865 | 42.2 | 987582 | 450.9 | 86967 | 92.0 | — | | | | | |
| | 71372 | | 25672 | | | | | | | | | |
| 6 | 68980 | 104.2 | 999434 | 993.2 | 87210 | 108.6 | — | | | | | |
| 7 | ~~70983~~ #00 | 81.1 | ~~021527~~ #00 | 1083.0 | 87497 | (124.2) | — | | | | | |
| 8 | 73874 | 87.3 | 54281 | 894.0 | ~~87497~~ | (124.2) | — | | | | | |
| 9 | 76179 | 95.4 | 77898 | 957.6 | 88153 | 127.2 | — | | | | | |
| 10 | 78698 | 63.0 | 103194 | 659.6 | 88489 | 133.2 | — | | | | | |
| | | | | | | | | | | | | |
| 11 | 80362 | 8.9 | 120618 | 115.6 | 88841 | (143.6) | — | | | | | |
| 12 | 80597 | 39.1 | 123672 | 317.6 | — | | — | | | | | |
| 13 | 81630 | 104.1 | 132061 | 1040.7 | — | | — | | | | | |
| 14 | 84381 | 84.7 | 159554 | 923.5 | — | | — | | | | | |
| 15 | 86619 | 90.8 | 183949 | 1105.9 | — | | — | | | | | |
| | | | | | | | | | | | | |
| 16 | 89017 | 85.2 | 213163 | 970.7 | — | | — | | | | | |
| 17 | 91269 | 58.0 | 238805 | 816.1 | — | | — | | | | | |
| 18 | 92800 | 11.9 | 260365 | 284.1 | — | | — | | | | | |
| 19 | 93115 | 55.7 | 267871 | 397.0 | — | | — | | | | | |
| 20 | 94586 | 84.6 | 298359 | 874.2 | — | | — | | | | | |
| | | | | | | | | | | | | |
| 21 | 96820 | 157.1 | 301452 | 984.2 | — | | — | | | | | |
| 22 | 100970 | 198.3 | 327560 | 1049.4 | — | | — | | | | | |
| 23 | 106208 | 172.2 | 355173 | 953.3 | — | | — | | | | | |
| 24 | 110757 | 163.0 | 380357 | 686.7 | — | | — | | | | | |
| 25 | 115064 | 67.9 | 398498 | 155.3 | — | | — | | | | | |
| | | | | | | | | | | | | |
| 26 | 116858 | 130.4 | 402600 | 435.2 | — | | — | | | | | |
| 27 | 120304 | 206.9 | 414096 | 959.8 | — | (143.6) | — | | | | | |
| 28 | 125769 | 154.5 | 439452 | 983.3 | 95289 | 184.7 | — | | | | | |
| 29 | 129850 | 143.2 | 465429 | 1101.5 | 95777 | 146.9 | — | | | | | |
| 30 | 133634 | 60.7 | 494528 | ~~1731.9~~ | 96165 | ~~[illegible]~~ | — | | | | | |
| | | | | 596.3 | | 125.3 | | | | | | |
| 31 | 135237 | 64.1 | 510280 | 326.6 | 96496 | 32.9 | — | | | | | |
| 1 | 136931 | — | 518907 | — | 96583 | — | — | | | | | |
| MAX | | 206.9 | | 1294.2 | | 184.7 | | est 381.6 | | | | |
| AVE | Δ/26.417 | 92.8 | Δ/26.417 | 758.6 | Δ/26.417 | 131.3 | Δ/2.6417 | ? | | | | |
| MIN | | 8.9 | | 115.6 | | 32.9 | | | | | | |

COMMENTS — * – All 8:00 A.M. READINGS.

No comment on lack of M.V. #2 log 4/12 – 4/27

M.V. #3 still broken. est @ (90 + 120 gpm)/3 = 70 gpm

SCOEPA00035031

EFFICIENCY® LINE 22-213

MONTH: 4/81
YEAR: 1981

Wastewater Report (Columns are in mg/L and Kg/Day respectively, $m^3$/Day, and pH units/ $^oC$ )

| | | Process Flow | BOD | | TSS | | $Cr^{6+}$ | | Cr | | $F^-$ | | MV#3 Flow | $PO_4^{\equiv}$ | CD pH/T | MV3 pH/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * W | 1294.2 | 34 | 44.0 | 32 | 41.4 | 0.001 | 0.001 | 0.002 | 0.003 | 5.8 | 7.5 | NOT | 2.0 | 8.2/16 | 7.2/13 |
| 2 | T | 1122.3 | | | | | | | | | | | YET | | | |
| 3 | F | 802.5 | | | | | | | | | | | REPAIRED | | | |
| 4 | S | 182.9 | | | | | | | | | | | | | | |
| 5 | S | 450.9 | | | | | | | | | | | | | | |
| 6 | M | 993.2 | | | | | | | | | | | | | | |
| 7 | T | 1083.0 | | | | | | | | | | | | | | |
| 8 | * W | 894.0 | 52 | 46.5 | 56 | 50.0 | 0.000 | -0- | 0.007 | 0.006 | 9.0 | 8.0 | | 0.8 | 6.5/15 | 6.6/11 |
| 9 | T | 957.6 | | | | | | | | | | | | | | |
| 10 | F | 659.6 | | | | | | | | | | | | | | |
| 11 | S | 115.6 | | | | | | | | | | | | | | |
| 12 | S | 317.6 | | | | | | | | | | | | | | |
| 13 | M | 1040.7 | | | | | | | | | | | | | | |
| 14 | T | 923.5 | | | | | | | | | | | | | | |
| 15 | * W | 1105.9 | 27 | 29.9 | 22 | 24.3 | 0.001 | 0.001 | 0.002 | 0.002 | 4.4 | 4.9 | | 2.4 | 7.2/18 | 7.6/15 |
| 16 | T | 970.7 | | | | | | | | | | | | | | |
| 17 | F | 816.1 | | | | | | | | | | | | | | |
| 18 | S | 284.1 | | | | | | | | | | | | | | |
| 19 | S | 397.0 | | | | | | | | | | | | | | |
| 20 | M | 874.2 | | | | | | | | | | | | | | |
| 21 | T | 984.2 | | | | | | | | | | | | | | |
| 22 | * W | 1049.4 | 25 | 26.2 | 21 | 22.0 | 0.001 | 0.001 | 0.002 | 0.002 | 4.7 | 4.9 | | 3.2 | 8.1/18 | 6.7/15 |
| 23 | T | 953.3 | | | | | | | | | | | | | | |
| 24 | F | 686.7 | | | | | | | | | | | | | | |
| 25 | S | 155.3 | | | | | | | | | | | | | | |
| 26 | S | 435.2 | | | | | | | | | | | | | | |
| 27 | M | 959.8 | | | | | | | | | | | | | | |
| 28 | T | 983.3 | | | | | | | | | | | | | | |
| 29 | * W | 1101.5 | 16 | 17.6 | 34 | 37.5 | 0.002 | 0.002 | 0.005 | 0.005 | 4.0 | 4.4 | | 1.2 | 6.8/20 | 5.3/15 |
| 30 | T | 596.3 | | | | | | | | | | | | | | |
| 31 | F | 3266 | | | | | | | | | | | | | | |
| | Ave. | 758.6 | 30.8 | 32.8 | 33.0 | 35.0 | 0.001 | 0.001 | 0.004 | 0.004 | 5.6 | 5.9 | ? est. 38 | 1.9 | min 20 | 15 |
| | Min./Max. | 115.6 / 1294.2 | 16/52 | 17.6/46.5 | 21/56 | 22/50 | -0-/0.002 | -0-/0.002 | 0.002/0.007 | 0.002/0.006 | 4.0/9.0 | 4.4/8.0 | ? | 0.8/3.2 | 6.5/8.2 | 5.3/7.6 |

SCOEPA00035032

pH to river
violation days.

| min. | max. |
|---|---|
| — | 10.6 |
| — | 10.5 |
| — | 10.5 |
| — | 11.0 |

overall minimum 6.05 ⇒ 6.0
overall maximum 11.0
number exc. 4

WACKER

WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

May 13, 1981

Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Attention: Mr. Stephen C. Carter

Dear Sir:

For your information, I have assembled a list of activities for the month of April, 1981 related to the N.P.D.E.S. parameters:

Fluoride

The fluoride level now appears to have reached a stable level (see Figure No. 1) after a fluoride contaminant was removed from the concentrated acid and from the concentrated caustic system. Progress has also been made on optimizing the calcium to fluoride ratio. A continuous fluoride monitor will be made operational during the week of May 8.

BOD

BOD levels continue to be higher than the acceptable average, but a good portion of this level for April was caused by plugging of the new lapping liquids system, unexpectedly causing high BOD materials to overflow into the back-up system, the silicon solids grit trap. This resulted in temporarily-high BOD levels in the clarifier, (see 4/8/81 levels on Figure No. 1). By adjusting the preventative maintenance procedures for the new lapping waste system, these type problems will not recur. On April 11 and 12, a mis-connection between the acid drain and organic waste system was corrected. The full impact of this change was masked by high BOD levels due to the above-mentioned overflow. BOD levels have since decreased markedly as shown on Figure No. 1.

During late April two low flow, high BOD streams previously dumped to the weak acid system, were directed to the organic waste stream. This change should further improve BOD levels in the effluent and be evident by next month.

TSS

Total suspended solids control is still being affected by short periods of pH cycling in the clarifier. A holding tank equipped with a "metering baffle" has been designed for the purpose of eliminating acidity surges resulting from the acid etching areas. This PVDF tank is now out for bid at local fabrication shops.

SCOEPA00035034

WACKER



Please call for further comments or questions regarding the above.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis
Facilities Manager

JRE/kk

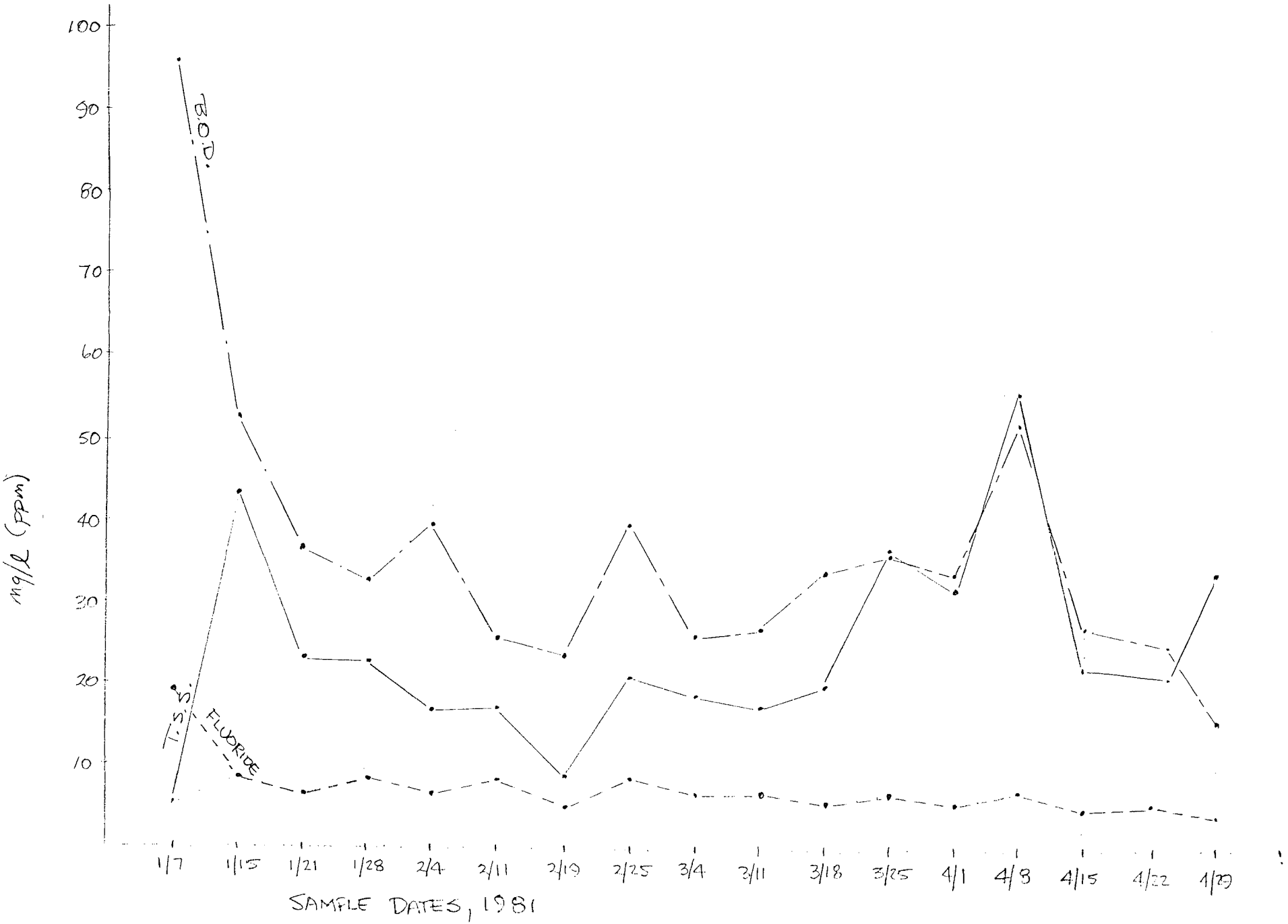
Attachment

cc: Mal Russ
John Pittman
Dirk Dunning
Fred Wale
Steve Beiswenger
File

FIGURE NO. 1 —WACKER SILTRONIC CORP.

N.P.D.E.S. DISCHARGE PARAMETERS

5/12/81




SCOEPA00035036

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME
ADDRESS
FACILITY
LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR 0030458-9 | 013 |

2824-J
file # 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 91 | 04 | 01 | TO | 91 | 04 | 30 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater FLOW | SAMPLE MEASUREMENT | 759 | 1294 | $m^3/d$ | — | — | — | — | — | daily | Totalizer record |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| BOD | SAMPLE MEASUREMENT | 32.8 | 46.5 | kg/d | 16 | 30.8 | 52 | mg/l | 4 | weekly | 24 HC |
| | PERMIT REQUIREMENT | 13 | 26 | | | | | | 0 | | |
| TSS | SAMPLE MEASUREMENT | 35 | 50 | kg/d | 21 | 33 | 56 | mg/l | 4 | weekly | 24 HC |
| | PERMIT REQUIREMENT | 11 | 22 | | | | | | 0 | | |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.001 | 0.002 | kg/d | <0.001 | 0.001 | 0.002 | mg/l | 0 | weekly | 24 HC |
| | PERMIT REQUIREMENT | 0.01 | 0.02 | | | | | | 0 | | |
| $Cr^{Total}$ | SAMPLE MEASUREMENT | 0.004 | 0.006 | kg/d | 0.002 | 0.004 | 0.006 | mg/l | 0 | weekly | 24 HC |
| | PERMIT REQUIREMENT | 0.2 | 0.3 | | | | 1.0 | | 0 | | |
| $F^-$ | SAMPLE MEASUREMENT | 5.9 | 8.0 | kg/d | 4.0 | 5.6 | 9.0 | mg/l | 1 ① | weekly | 24 HC |
| | PERMIT REQUIREMENT | 3.5 | 7.1 | | | | | | 0 | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 6.0 | — | 11.0 | pH UNITS | 4 | daily | CONT |
| | PERMIT REQUIREMENT | | | | 6.0 | | 9.0 | | 0 | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE AREA CODE | TELEPHONE NUMBER | DATE YEAR | DATE MO | DATE DAY |
|---|---|---|---|---|---|---|---|
| JOHN PITTMAN<br>DIRECTOR OF ENGINEERING<br>TYPED OR PRINTED | | Karen K. Ellis for<br>JOHN L. PITTMAN | 503 | 243-2020 | 91 | 04 | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
① AVERAGE LOADING EXCEEDS MAXIMUM – NO OTHERS.
See attached letter addressed to Mr. Stephen Coulter, dated 5/13/81 regarding plant activities regarding these parameters.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 1 OF 2

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME
ADDRESS
FACILITY
LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR 0030458-9 | 013 |

2834-J
file # 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 04 | 01 | TO | 81 | 04 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COOLING WATER AND BOILER BLOWDOWN FLOW ~~TOTAL PO4 E~~ | SAMPLE MEASUREMENT | 381 ① | 381 ① | $m^3/d$ | — | — | — | — | — | 0/7 | CONT |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |
| TOTAL $PO_4$ E<br>~~FLOW~~ | SAMPLE MEASUREMENT | — | — | — | 0.8 | 1.9 | 3.2 | mg/l | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 5.0 | | 0 | 1/7 | GRAB |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 6.5 | — | 8.2 | pH UNITS | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | 1/7 | GRAB |
| TEMPERATURE | SAMPLE MEASUREMENT | — | — | — | — | — | 20 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 33 | | 0 | 1/7 | GRAB |
| FREE AVAILABLE CHLORINE | SAMPLE MEASUREMENT | — | — | — | — | <0.1 | <0.1 | mg/l | 0 | during chlorinate | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 0.2 | | 0 | during chlorinate | GRAB |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE AREA CODE | TELEPHONE NUMBER | DATE YEAR | DATE MO | DATE DAY |
|---|---|---|---|---|---|---|---|
| JOHN PITTMAN<br>DIRECTOR OF ENGINEERING<br>TYPED OR PRINTED | | Karen K. Ellis for<br>JOHN L. PITTMAN | 503 | 243-2020 | 81 | 04 | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
① HOLD. VAULT IN MARCH, NOT OPERATIONAL – ESTIMATE BASED ON KNOWN FLOWS.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 2 OF 2

SCOEPA00035037

WACKER

# WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

April 10, 1981

Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Attention: Mr. Stephen C. Carter

Dear Sir:

This letter is being written in a continuing attempt to update you on activity at Wacker Siltronic which will improve the N.P.D.E.S. parameters.

A.) The attached Figure No. 1 indicates that the BOD, TSS, and Fluoride levels have stabilized somewhat after changes outlined to you in my memo of February 13, 1981.

As anticipated, BOD still remains above our targeted average and must be reduced. A mis-connection has been discovered which has allowed process organic waste to enter the concentrated acid drain system. This mis-connection will be corrected by contract work scheduled to be done during Saturday, April 11 and Sunday, April 12.

The inconsistency during the last several months with TSS can be partially attributed to experimentation with different alum und polymer combinations in the clarifier. We feel that elimination of the above-mentioned mis-connection will aid with TSS improvement because organics in the clarifier tend to act as dispersants.

The fluoride level has been reduced due to removal of a fluoride contaminant in the concentrated caustic waste. This caustic waste stream is not continuously treated with lime for the removal of the fluoride ion.

We are continuing to dye-check drain systems in the Process Building in an attempt to balance actual BOD, TSS, and fluoride levels with that of design, (see attached guideline ) by eliminating incorrectly-connected drains.

B.) We also have initiated an additional engineering program to investigate the feasibility of adding second-stage concentrated acid neutralization at the Waste Treatment Plant. If found to be feasible, this modification could stabilize pH levels and therefore create a more uniform operation by eliminating pH surging.

We will continue to inform you of results from current projects and also the initiation of new projects.

SCOEPA00035038

Please call if there are any questions or comments.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis

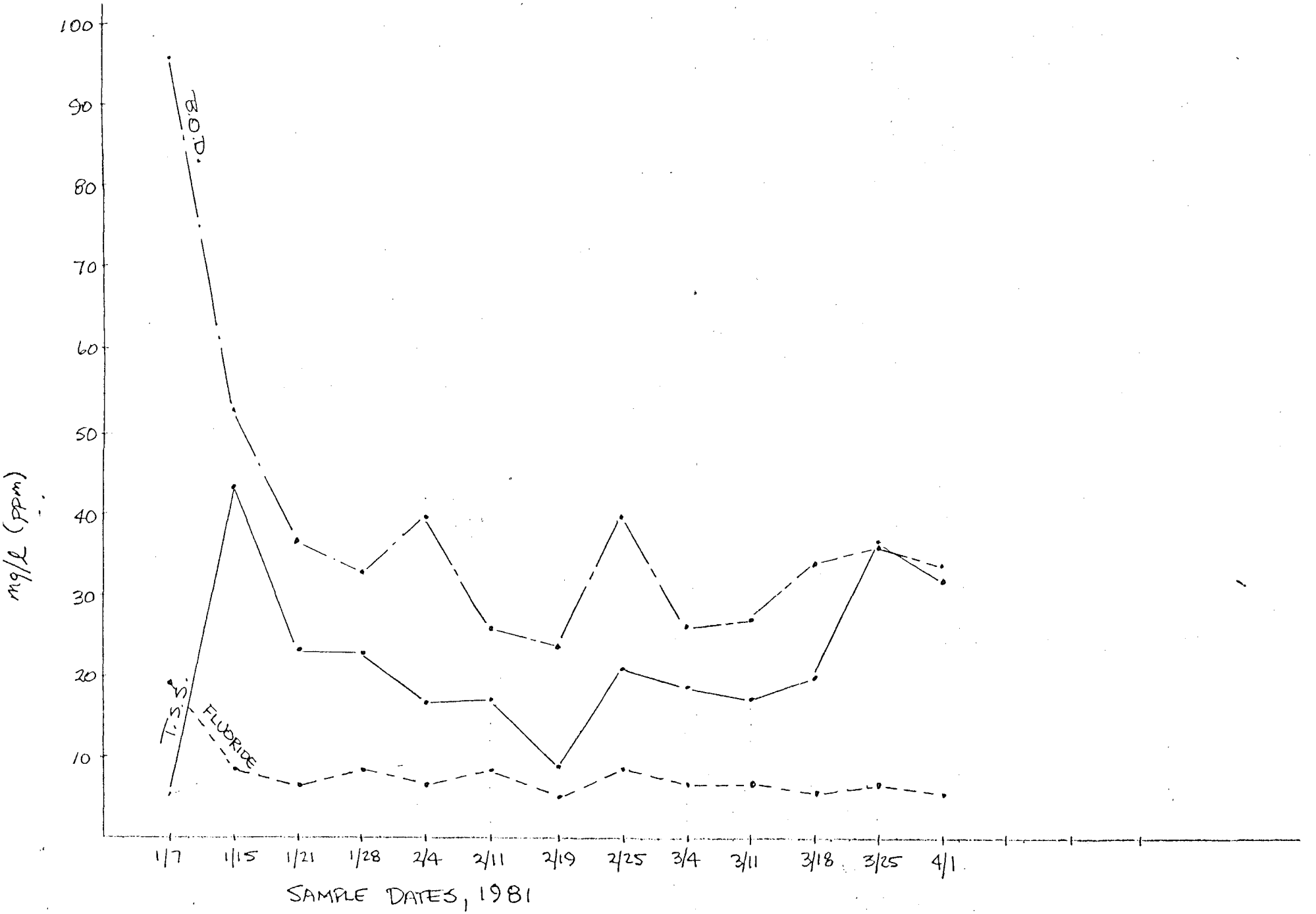
James R. Ellis
Facilities Manager

JE/kk
Attachments (2)

cc: Mal Russ
John Pittman
Dirk Dunning
Fred Wale
Steve Beiswenger
File

# FIGURE NO. 1 — WACKER SILTRONIC CORP.
# N.P.D.E.S. DISCHARGE PARAMETERS

4/10/81




SCOEPA00035040

WACKER

SWW - Silicon Waste
CAD - Concentrated Acid
CCW - Concentrated Caustic
WAD - Weak Acid
OWW - Organic Waste

DRAIN-TRACING GUIDELINE

ASSIGNMENT: DIRK DUNNING

BOD

| Drain System | Design, ppm | Actual, ppm |
|---|---|---|
| SWW | 16 | 217 |
| CAD | 0 | 2.3 |
| CCW | 0.7 | 6 |
| WAD | 7.9 | 28 |
| OWW | 2462 | 300-500 |

Comments: SWW & WAD drain systems contain wastes which appear to belong in the OWW system. (Suspect cleaning agents prep area drained improperly to WAD system.)

TSS

| Drain System | Design, ppm | Actual, ppm |
|---|---|---|
| SWW | 977 | 642 |
| CAD | 0 | 0 |
| CCW | 0 | 0 |
| WAD | 0 | 17.1 |
| OWW | - | - |

Comments: WAD drain system may contain stream which belongs to SWW system.

FLUORIDE

| Drain System | Design, ppm | Actual, ppm |
|---|---|---|
| SWW | 0 | <0.1 |
| CAD | 978 | 178 |
| CCW | 0 | 87 |
| WAD | 0 | 0.1 |
| OWW | 0 | 0.1 |

Comments: CCW drain system contains high fluoride-containing stream which belongs in the CAD drain system.

| Sample Day | | total gal X10⁻¹ COMB. | gpd Δ | m³/d |
|---|---|---|---|---|
| | 2/28 | 287517 | 39,130 | 148.2 |
| S | 3/1 | 291430 | 138,690 | 525.3 |
| S | 2 | 305299 | 146,660 | 555.5 |
| M | 3 | 319965 | 284,900 | 1079.2 |
| * T | 4 | 348455 | 138,430 | 524.4 |
| W | 5 | 362298 | 260,010 | 984.9 |
| T | 6 | 388299 | 183,490 | 695.0 |
| F | 7 | 406648 | 29,060 | 110.1 |
| S | 8 | 409554 | 97980 | 371.1 |
| S | 9 | 419352 | 4,037,920 | total 1525.2 |
| M | 10 | | | |
| * T | 11 | | ave gpd. 212,522 | 805.0 |
| W | 12 | | | |
| T | 13 | | | |
| F | 14 | | | |
| S | 15 | | | |
| S | 16 | | | |
| M | 17 | | | |
| T | 18 | | | |
| * W | 19 | | | |
| T | 20 | | | |
| F | 21 | | | |
| S | 22 | | | |
| S | 23 | | | |
| M | 24 | | | |
| T | 25 | | | |
| * W | 26 | | | |
| T | 27 | | | |
| F | 28 | 823144 | 58,850 | 222.9 |
| S | 29 | 829029 | 89,600 | 339.4 |
| S | 30 | 837989 | 269,100 | 1019.3 |
| M | 31 | 864899 | 327,520 | 1240.6 |
| T | 4/1 | 897651 | — | — |
| * W | S | 501.4 | m³/d | |
| | M | 956.0 | | |
| | T | 1098.7 | | |
| | W | 891.0 | | |
| | T | 950.7 | | |
| | F | 684.9 | | |
| | S | 202.4 | | |

COMBINED DISCHARGE = WAD + clarifier no meter v. #3 in these #'s

110.1 = minimum flow

month ave flow 745.5 m³/d

meter Vault #3 defective

est. flow

$\simeq \frac{(110+60) \times \frac{1}{3} \text{ GPM} \times 60 \times 24}{264}$

$= 310 \text{ m}^3/\text{d}$

1098.7 = max daily flow.

estimates for missing period based on (755.1 m³/d) average flows & weekly profile from February 81

these compare favorably with the above actual numbers!

| | | OWW | @OMB. | #2 | #3 | |
|---|---|---|---|---|---|---|
| 2/ | 28 | 7002 | 287517 | 76835 | 226805 | |
| 3/ | 1 | 7388 | 291430 | 77072 | 226805 | |
| | 2 | 8720 | 305299 | 77339 | 226818 | |
| | 3 | 10247 | 319965 | — | — | d.j. |
| | 4 | 12588 | 348455 | 77889 | 226940 | |
| | 5 | 14102 | 362298 | — | — | gary |
| | 6 | 16418 | 388299 | — | — | |
| | 7 | 17721 | 406648 | — | — | d.j. |
| | 8 | 18057 | 409554 | 78989 | — | |
| | 9 | 19498 | 419352 | 79195 | — | MAR |
| | 10 | | | | | |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | | | |
| | 25 | | | | | |
| | 26 | | | | | |
| | 27 | | | | | |
| | 28. | 54290 | 823144 | — | — | G.P. |
| | 29 | 54653 | 829029 | — | — | G.P. |
| | 30 | 55709 | 837989 | — | — | gary |
| | 31 | 58641 | 864899 | 85573 | — | d.j. |
| 4/ | 1 | 60907 | 897651 | 85832 | — | |

loop missing last ??

| | T/pH @OMB. | T/pH #3 |
|---|---|---|
| 3/4 | 16/7.1 | 12/6.3 |
| 3/11 | 18/6.9 | 12/6.7 |
| 3/18 | 17/7.4 | 13/7.0 |
| 3/25 | 19/7.1 | 14/7.0 |

EFFICIENCY® LINE 22-213

MONTH: MAR
YEAR: 1981

Wastewater Report (Columns are in mg/L and Kg/Day respectively, $m^3$/Day, and pH units/ $^oC$ )

| | Process Flow | BOD | | TSS | | $Cr^{6+}$ | | Cr | | $F^-$ | | MV#3 Flow | $PO_4^{\equiv}$ | CD pH/T | MV3 pH/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.2 | | | | | | | | | | | 310 m³/d est. once. | | | |
| 2 | 525.3 | | | | | | | | | | | | | | |
| 3 | 555.5 | | | | | | | | | | | | | | |
| 4 | 1079.2 | 26 | 28.0 | 18.5 | 20.0 | ⊖ | ⊖ | 0.008 | 0.009 | 6.3 | 6.8 | | 0.3 | 7.4/16 | 6.3/12 |
| 5 | 524.4 | | | | | | | | | | | | | | |
| 6 | 984.9 | | | | | | | | | | | | | | |
| 7 | 695.0 | | | | | | | | | | | | | | |
| 8 | 110.1 Low | | | | | | | | | | | | | | |
| 9 | 371.1 | | | | | | | | | | | | | | |
| 10 | ~~456.0 est.~~ | | | | | | | | | | | | | | |
| 11 | 1098.7 est. | 27 | 24.1 | 17.8 | 15.9 | ⊖ | ⊖ | 0.005 | 0.004 | 6.3 | 5.6 | | 1.6 | 6.9/18 | 6.7/12 |
| 12 | 891.0 est. | | | | | | | | | | | | | | |
| 13 | 950.7 est. | | | | | | | | | | | | | | |
| 14 | 684.9 est. | | | | | | | | | | | | | | |
| 15 | 202.4 est. 501.4 est. | | | | | | | | | | | | | | |
| 16 | 956.0 est. | | | | | | | | | | | | | | |
| 17 | 1098.7 est. | | | | | | | | | | | | | | |
| 18 | 891.0 est. | 34 | 30.3 | 20.0 | 17.8 | ⊖ | ⊖ | 0.004 | 0.004 | 5.8 | 5.2 | | 1.2 | 7.4/17 | 7.0/13 |
| 19 | 950.7 est. | | | | | | | | | | | | | | |
| 20 | 684.9 est. | | | | | | | | | | | | | | |
| 21 | 202.4 est. | | | | | | | | | | | | | | |
| 22 | 956.0 501.4 est. | | | | | | | | | | | | | | |
| 23 | 1098.7 est. | | | | | | | | | | | | | | |
| 24 | 891.0 est. | | | | | | | | | | | | | | |
| 25 | 950.7 est. | 36 | 32.1 | 38.1 | 33.9 | ⊖ | ⊖ | 0.005 | 0.004 | 6.5 | 5.8 | | 1.1 | 7.1/19 | 7.0/14 |
| 26 | 684.9 est. | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | |
| 28 | 222.9 | | | | | | | | | | | | | | |
| 29 | 339.4 | | | | | | | | | | | | | | |
| 30 | 1019.3 | | | | | | | | | | | | | | |
| 31 | 1240.6 | | | | | | | | | | | | | | |
| | Ave. 745.5 | 30.8 | 28.6 | 23.6 | 21.9 | ⊖ | ⊖ | 0.005 | 0.005 | 6.2 | 5.8 | | 1.0 | 6.9/7.4 | 6.3/7.0 |
| | Min./Max. 110.1 / 1099 | 26/36 | 24.1/32.1 | 17.8/38.1 | 15.9/33.9 | ⊖/⊖ | ⊖/⊖ | 0.004/0.008 | 0.004/0.009 | 5.8/6.5 | 5.2/6.8 | | 0.3/1.6 | ~~19~~ 19 | 14 |

SCOEPA00035044

pH violation days.

| min | max. |
|---|---|
| | 11.7 |
| | 9.7 |
| | 9.9 |
| | 9.6 |
| | 10.2 |
| | 9.7 |
| | 9.3 |
| | 9.3 |
| | 9.4 |
| 2.8 — | 12.2 |
| | 9.3 |
| | 9.6 |
| overall 2.8 — | 12.2 12 days |

SCOEPA00035045

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

(2-16) OR-003058-9 — PERMIT NUMBER

(17-19) 012 — DISCHARGE NUMBER

2834-F
File No. 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 2 | 28 | TO | 81 | 3 | 31 |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROCESS WASTEWATER FLOW | SAMPLE MEASUREMENT | 745.5 | 1099 | $m^3/d$ | — | — | — | — | — | CONT | CONT |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| BOD | SAMPLE MEASUREMENT | 28.6 | 32.1 | kg/d | 26 | 30.8 | 36 | mg/l | 4 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TSS | SAMPLE MEASUREMENT | 23.6 | 38.1 | kg/d | 15.9 | 21.9 | 33.9 | mg/l | 1 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $F^-$ | SAMPLE MEASUREMENT | 5.8 | 6.8 | kg/d | 5.8 | 6.2 | 6.5 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | ⊖ | ⊖ | kg/d | ⊖ | ⊖ | ⊖ | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{TOTAL}$ | SAMPLE MEASUREMENT | 0.005 | 0.009 | kg/d | 0.004 | 0.005 | 0.008 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 2.8 | — | 12.2 | pH UNITS | 12 | CONT | CONT |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| John Pittman<br>Director of Engineering | | John Pittman | AREA CODE | NUMBER | YEAR | MO | DAY |
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | 503 | 243-2020 | 81 | 4 | 15 |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

BOD, Fluoride & chrome levels were stabilized after efforts toward improvement during the first quarter, (See memo to Steve Cantin dated 4/10/81). TSS on eighteen days during the month due to the fact that the sulfuric acid supply pump became clogged with sludge, upsetting clarifier pH control. Pipe damage due to apparent corrosion will necessitate some replacement. Monthly flow average shown is based on partial data as 18 daily logs were missing at month end.



PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

(2-16) OR-003058-9 — PERMIT NUMBER

(17-19) 012 — DISCHARGE NUMBER

2834-F
File No. 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 02 | 28 | TO | 81 | 03 | 31 |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COOLING WATER AND BOILER BLOWDOWN FLOW | SAMPLE MEASUREMENT | 310* | * | $m^3/h$ | — | — | — | — | — | 8/7 | CONT |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TOTAL $PO_4$ | SAMPLE MEASUREMENT | — | — | — | 0.3 | 1.0 | 1.6 | mg/l | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 6.9 | — | 7.4 | pH UNITS | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Temperature | SAMPLE MEASUREMENT | — | — | — | — | — | 19 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | | | | | — | 27 | | | | |
| Free Available Chlorine | SAMPLE MEASUREMENT | — | — | — | — | ⊖ | ⊖ | mg/l | 0 | Minimum Daily | GRAB |
| | PERMIT REQUIREMENT | | | | | 0.2 | 0.5 | | | 1/Batch | GRAB |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| John Pittman<br>Director of Engineering | | John Pittman | AREA CODE | NUMBER | YEAR | MO | DAY |
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | 503 | 243-2021 | 81 | 9 | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

* water meeting spill criteria permit - prior to discharge - sent to Stein Flows.



SCOEPA00035046

EFFICIENCY® LINE 22-213

MONTH: Feb.
YEAR: 1981

Wastewater Report (Columns are in mg/L and Kg/Day respectively, $m^3$/Day, and pH units/ °C )

| | Process Flow | BOD | | TSS | | $Cr^{6+}$ | | Cr | | $F^-$ | | MV#3 Flow | $PO_4^{\equiv}$ | CD pH/T | MV3 pH/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 373.8 | | | | | | | | | | | 48 | | | |
| 2 | 769.0 | | | | | | | | | | | 4.4 | | | |
| 3 | 919.3 | | | | | | | | | | | 6.4 | | | |
| 4 | 780.3 | 40 | 31.2 | 16.9 | 13.2 | ⊖ | ⊖ | 0.01 | 0.007 | 6.5 | 5.1 | 0.9 | 0.5 | 7.1/18 | 6.9/16 |
| 5 | 787.7 | | | | | | | | | | | (4.0) | | | |
| 6 | 582.0 | | | | | | | | | | | (4.0) | | | |
| 7 | 115.4 | | | | | | | | | | | (4.0) | | | |
| 8 | 418.3 | | | | | | | | | | | 60.5 | | | |
| 9 | 740.5 | | | | | | | | | | | ⊖ | | | |
| 10 | 906.5 | | | | | | | | | | | 7.8 | | | |
| 11 | 665.7 | 26 | 17.0 | 17.8 | 11.6 | ⊖ | ⊖ | ⊖ | ⊖ | 8.2 | 5.4 | 31.5 | 0.2 | 6.8/19 | 7.1/14 |
| 12 | 677.6 | | | | | | | | | | | 50 | | | |
| 13 | 552.3 | | | | | | | | | | | 59.1 | | | |
| 14 | 216.6 | | | | | | | | | | | (54) | | | |
| 15 | (1396) | | | | | | | | | | | (54) | | | |
| 16 | (755) | | | | | | | | | | | ~~47.6~~ (54) | | | |
| 17 | (868) | | | | | | | | | | | ~~(59.6)~~ 47.6 | | | |
| 18 | (704) | | | | | | | | | | | (59.6) | | | |
| 19 | (751) | 24 | 18.0 | 10.4 | 7.8 | ⊖ | ⊖ | ⊖ | ⊖ | 4.7 | 3.5 | ~~59.6~~ | 1.7 | 7.1/18 | 7.0/15 |
| 20 | (541) | | | | | | | | | | | ~~21.0~~ 12.4 | | | |
| 21 | (160) | | | | | | | | | | | 21.0 | | | |
| 22 | (396) | | | | | | | | | | | 21.0 | | | |
| 23 | (755) | | | | | | | | | | | (38) | | | |
| 24 | 779.9 | | | | | | | | | | | (28) | | | |
| 25 | 675.0 | 40 | 27.0 | 21 | 14.2 | 0.14 | 0.09 | 0.20 | 0.14 | 8.6 | 5.8 | (28) | 1.2 | 7.0/19 | 7.1/15 |
| 26 | 788.5 | | | | | | | | | | | (28) | | | |
| 27 | 490.3 | | | | | | | | | | | (28) | | | |
| 28 | 148.1 | | | | | | | | | | | (28) | | | |
| 29 | | | | | | | | | | | | WRONG | | | |
| 30 | | | | | | | | | | | | ↑ | | | |
| 31 | | | | | | | | | | | | | | | |
| | Ave. 600 | 32.5 | 23.3 | 16.5 | 11.7 | 0.035 | 0.02 | 0.05 | 0.037 | 7.0 | 5.0 | 1365 | 0.9 | 7.0/18.5 | 7.0/15 |
| | Min./Max. 115.4/919.3 | 24/40 | 17.0/31.2 | 10.4/21 | 7.8/14.2 | ⊖/0.14 | ⊖/0.09 | ⊖/0.2 | ⊖/0.14 | 4.7/8.6 | 3.5/5.8 | UNK/UNK | 0.2/1.7 | 6.8-7.1 | 6.9-7.1 |

SCOEPA00035047

pH day violations.

1 – 10.4

1 - 9.3

1 - 10.5

---

viol. 3 – 10.5

min pH 6.0

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR-003058-9 | 011 |

2834-J
File No. 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 01 | 31 | TO | 81 | 02 | 28 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROCESS WASTEWATER FLOW | SAMPLE MEASUREMENT | 600 | 919 | $m^3/d$ | — | — | — | — | — | CONT | CONT |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| BOD | SAMPLE MEASUREMENT | 23.3 | 31.2 | kg/d | 24 | 32.5 | 40 | mg/l | 2 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TSS | SAMPLE MEASUREMENT | 16.5 | 21.0 | kg/d | 10.4 | 16.5 | 21 | mg/l | 1① | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $F^-$ | SAMPLE MEASUREMENT | 5.0 | 5.8 | kg/d | 4.7 | 7.0 | 8.6 | mg/l | 1① | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.02 | 0.09 | kg/d | 0 | 0.03 | 0.14 | mg/l | 1 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr$ TOTAL | SAMPLE MEASUREMENT | 0.04 | 0.14 | kg/d | 0 | 0.02 | 0.09 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 6.0 | — | 10.5 | pH UNITS | 3 | CONT | CONT |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| John P. Pittman<br>Director of Engineering | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE 503 | NUMBER 243-2020 | YEAR 81 | MO 02 | DAY |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

① No. sing'a measurement exceeds maximum — monthly averages exceed limit.

See attached comments —



PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR-003058-9 | 011 |

2834-J
File No. 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 01 | 31 | TO | 81 | 02 | 28 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COOLING WATER AND BOILER BLOWDOWN FLOW | SAMPLE MEASUREMENT | 136.5② | 136.5② | $m^3/d$ | — | — | — | — | — | 7/7 | CONT |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | 7/7 | CONT |
| TOTAL $PO_4$ | SAMPLE MEASUREMENT | — | — | — | 0.2 | 0.9 | 1.7 | mg/l | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | | | | | | 5.0 | | | 1/7 | GRAB |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 6.8 | — | 7.1 | pH UNITS | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | — | 6.0 | — | 9.0 | | 0 | 1/7 | GRAB |
| Temperature | SAMPLE MEASUREMENT | — | — | — | — | — | 19 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | — | — | — | 37 | | 0 | 1/7 | GRAB |
| Free Available Chlorine | SAMPLE MEASUREMENT | — | — | — | — | 0 | 0 | mg/l | 0 | during chlorin. | GRAB |
| | PERMIT REQUIREMENT | — | — | — | — | — | 0.5 | | 0 | 1/7 | GRAB |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | — | — | — | — | | — | — | — |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| John Pittman<br>Director of Engineering | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE 503 | NUMBER 243-2020 | YEAR 81 | MO 02 | DAY |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

② ESTIMATED MEASUREMENT BASED ON KNOWN WATER USAGE — ACTUAL METER READINGS OF 28.6 AVG AND 45 MAX $m^3/d$. METER IS BEING REPAIRED. IT WAS FOUND TO BE DEFECTIVE.



SCOEPA00035049

WACKER

ATTACHMENT

As predicted in memo to Stephen Carter dated 2/13/81, N.P.D.E.S. parameters have improved. Work is continuing to locate any further cross-connections in process sub-grade drain system. Also work continues to optimize waste treatment operation.

Suffered in-plant chromic acid spill on February 24. Were notified immediately and caught spill in holding tank before it reached river discharge. At that point, this waste treated with reducing agent in an effort to convert any $Cr^{6+}$ to $Cr^{3+}$, then samples were analyzed for total chrome content with A-A as trucks were loaded for Arlington disposal site. Composite sampler indicates some $Cr^{6+}$ was not fully converted thus $Cr^{6+}$ exceeded maximum at 0.14 mg/l.

As a result of chrome spill, we have further modified process equipment and drains for chromic acid. Also have updated emergency procedures.

JRE/kk

Feb 81

| | | RIVER COMB. EFF. | MET. #3 |
|---|---|---|---|
| S | 1 | 373.8 | 48 |
| M | 2 | 769.0 | 4.4 |
| T | 3 | 919.3 | 0.4 |
| W | 4 | 780.3 | 0.9 |
| T | 5 | 787.7 | (4.0) |
| F | 6 | 582.0 | (4.0) |
| S | 7 | 115.4 | (4.0) |
| S | 8 | 418.3 | (60.5) |
| M | 9 | 740.5 | ~~60.5~~ |
| T | 10 | 906.5 | 7.8 ~~[illegible]~~ |
| W | 11 | 655.7 | 31.5 ~~7.8~~ |
| T | 12 | 677.6 | 50 ~~31.5~~ |
| F | 13 | 552.3 | 59.1 |
| S | 14 | 216.6 | (54) ~~59.1~~ |
| S | 15 | * (396) est | (54) |
| M | 16 | * (755) est | (54) |
| T | 17 | * (868) est | 47.6 ~~(54)~~ |
| W | 18 | * (704) est | (59.6) ~~47.6~~ |
| T | 19 | * (751) est | (59.6) |
| F | 20 | * (541) est | 12.4 ~~(59.6)~~ |
| S | 21 | * (160) est | 21.0 ~~12.4~~ |
| S | 22 | * (396) est | 21.0 ~~42.1~~ |
| M | 23 | * (755) est. | 3.8 |
| T | 24 | 779.9 | (28) est |
| W | 25 | 675.0 | (28) est |
| T | 26 | 788.5 | (28) est |
| F | 27 | 490.3 | (28) est |
| S | 28 | 148.1 | (28) est. |
| TOTAL | | 13821 | 801.6 |
| MIN | | 115.4 | ~~0~~ |
| AVE | | ~~598.8~~ 600 | 28.6 |
| MAX. | | 919.3 | 60.5 |
| $\sigma_{n-1}$ | | 244.9 | 24.5 |

wrong!! est. ~~[illegible]~~ 136.5

RIVER STAT'S

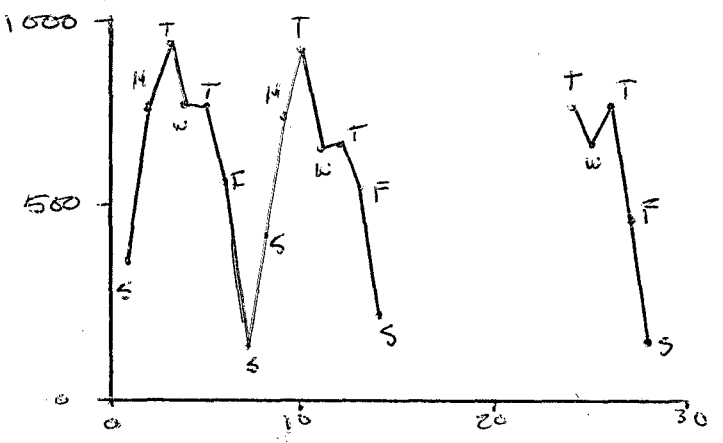
| | | |
|---|---|---|
| S | $\bar{x}$ | 396 |
| | $\sigma_{n-1}$ | 31 |
| M | $\bar{x}$ ~~[illegible]~~ | 755 |
| | $\sigma_{n-1}$ | 20 |
| T | $\bar{x}$ | 868 |
| | $\sigma_{n-1}$ | 77 |
| W | $\bar{x}$ | 704 |
| | $\sigma_{n-1}$ | 67 |
| T | $\bar{x}$ | 751 |
| | $\sigma_{n-1}$ | 63 |
| F | $\bar{x}$ | 541 |
| | $\sigma_{n-1}$ | 46 |
| S | $\bar{x}$ | 160 |
| | $\sigma_{n-1}$ | 52 |

median

$\bar{x} = 596.4$

$\sigma_{n-1} = 50.9$

| FACTORS | day/median $\bar{x}/\bar{x}_m$ | $\sigma_{n-1}/\sigma_{n-1}$ |
|---|---|---|
| S | 0.664 | 0.052 |
| M | 1.266 | 0.034 |
| T | 1.455 | 0.129 |
| W | 1.180 | 0.112 |
| T | 1.259 | 0.106 |
| F | 0.907 | 0.077 |
| S | 0.268 | 0.087 |



PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

NAME: WAFER SILTRONIC CORP
ADDRESS: P.O. BOX 03180
PORTLAND, OREGON 97203
FACILITY: HYPER-PURE SILICON PLANT
LOCATION: 7200 N.W. FRONT AVE. PORTLAND, OREGON 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

# DISCHARGE MONITORING REPORT (DMR)

(2-16) PERMIT NUMBER: OR 00305[illegible]9

(17-19) DISCHARGE NUMBER: 018

2834-J
93450 (File #)

MONITORING PERIOD
FROM: YEAR 81 (20-21) MO 09 (22-23) DAY 01 (24-25)
TO: YEAR 81 (26-27) MO 09 (28-29) DAY 30 (30-31)

NOTE: Read Instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Waste water FLOW | SAMPLE MEASUREMENT | 692.9 | 1107.2 | $m^3/d$ | — | — | — | — | 0 | DAILY | TOTAL RECORD |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | 0 | DAILY | TOTAL RECORD |
| BOD | SAMPLE MEASUREMENT | 23.9 | 28.9 | kg/d | 28 | 38 | 57 | mg/l | 4 | 1/7 WEEKLY | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24HC |
| TSS | SAMPLE MEASUREMENT | 13.0 | 21.4 | kg/d | 8 | 19 | 33 | mg/l | 1 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24HC |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.007 | 0.02 | kg/d | 0.001 | 0.013 | 0.040 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.01 | 0.05 | | — | 0.02 | 0.05 | | 0 | 1/7 | 24HC |
| $Cr^{total}$ | SAMPLE MEASUREMENT | 0.009 | 0.021 | kg/d | 0.001 | 0.015 | 0.042 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.2 | 0.5 | | — | 0.3 | 1.0 | | 0 | 1/7 | 24HC |
| $F^-$ | SAMPLE MEASUREMENT | 2.8 | 3.6 | kg/d | 3.8 | 4.3 | 4.8 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6 | 20 | | 0 | 1/7 | 24HC |
| pH | SAMPLE MEASUREMENT | — | — | — | 3.2 | — | 11.3 | pH UNITS | 8 | DAILY | CONT |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | DAILY | CONT |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| TYPED OR PRINTED | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE 503 | NUMBER 243-2020 | YEAR 81 | MO 10 | DA |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

① - We are in need of a new supply of forms!

(REPLACES EPA FORM 1.40 WHICH MAY NOT BE USED.)



SCOEPA00035052

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

NAME WA[illegible]R SILTRONIC CORP.
ADDRESS P.O. [illegible]X 03180
PORTLAND, OREGON 97203
FACILITY HYPER-PURE SILICON PLANT
LOCATION 7200 N.W. FRONT AVE.
PORTLAND, OREGON 97229

# DISCHARGE MONITORING REPORT (DMR)

(2-16) PERMIT NUMBER: OR 0030[illegible]39
(17-19) DISCHARGE NUMBER: 018

2834-J
File # 93450

MONITORING PERIOD
FROM YEAR (20-21) 81 MO (22-23) 09 DAY (24-25) 01
TO YEAR (26-27) 81 MO (28-29) 09 DAY (30-31) 30

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COOLING WATER AND BOILER BLOWDOWN TOTAL $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | 0.4 | 2.0 | 5.4 | mg/l | 1 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | 0 | 1/7 | GRAB |
| FLOW | SAMPLE MEASUREMENT | 658.5 | 850.6 | $M^3/d$ | — | — | — | — | 0 | DAILY | RECORD |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | 0 | DAILY | RECORD |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 6.9 | — | 7.4 | pH | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | UNITS | 0 | 1/7 | GRAB |
| TEMP. | SAMPLE MEASUREMENT | — | — | — | — | — | 27 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | 0 | 1/7 | GRAB |
| FREE AVAL. CHLORINE | SAMPLE MEASUREMENT | — | — | — | 0 | 0 | 0 | mg/l | 0 | during chlorinate | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | 0 | during chlorinate | GRAB |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER — TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 503 NUMBER 243-2020

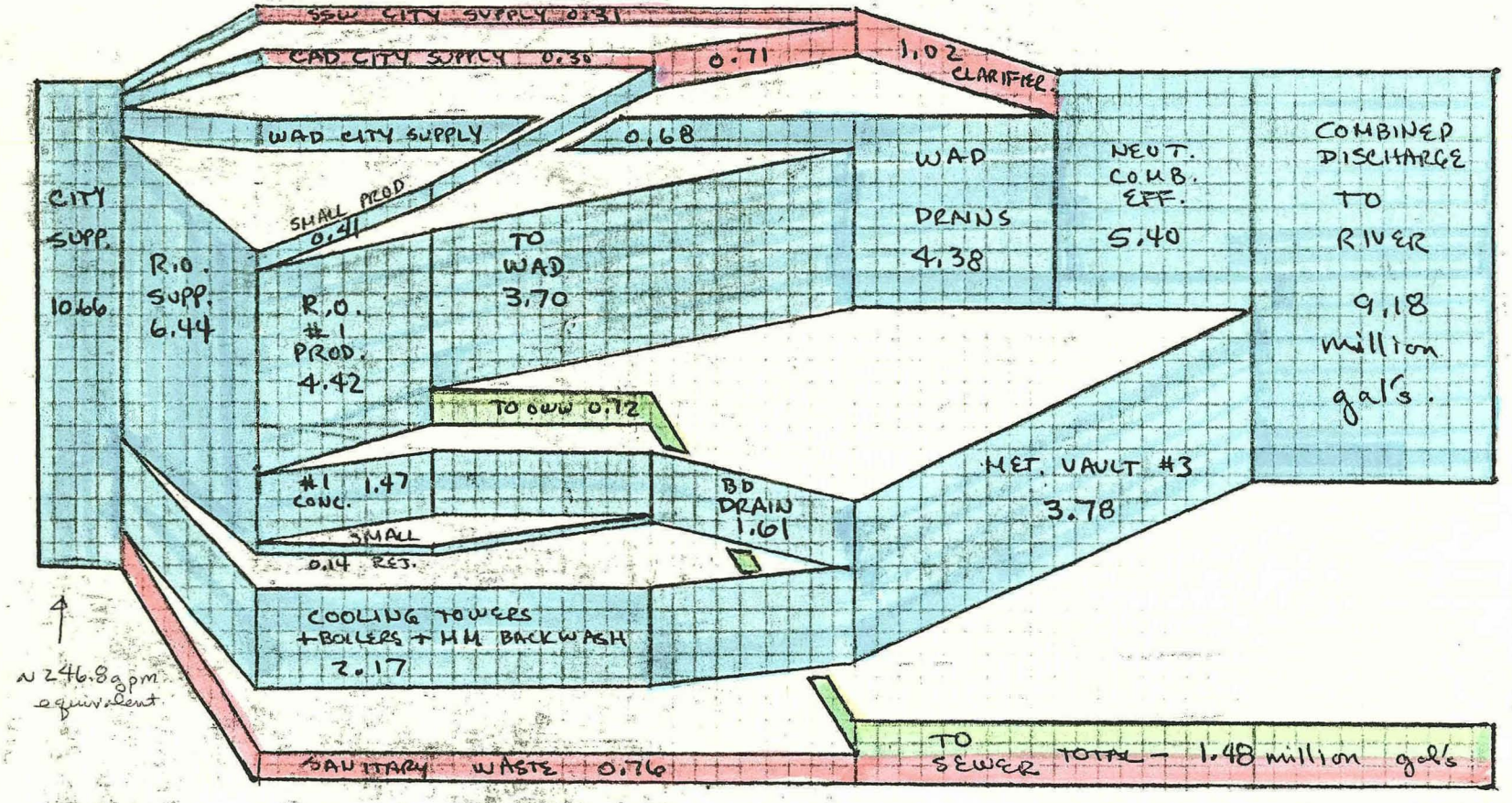
DATE: YEAR 81 MO 10 DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)



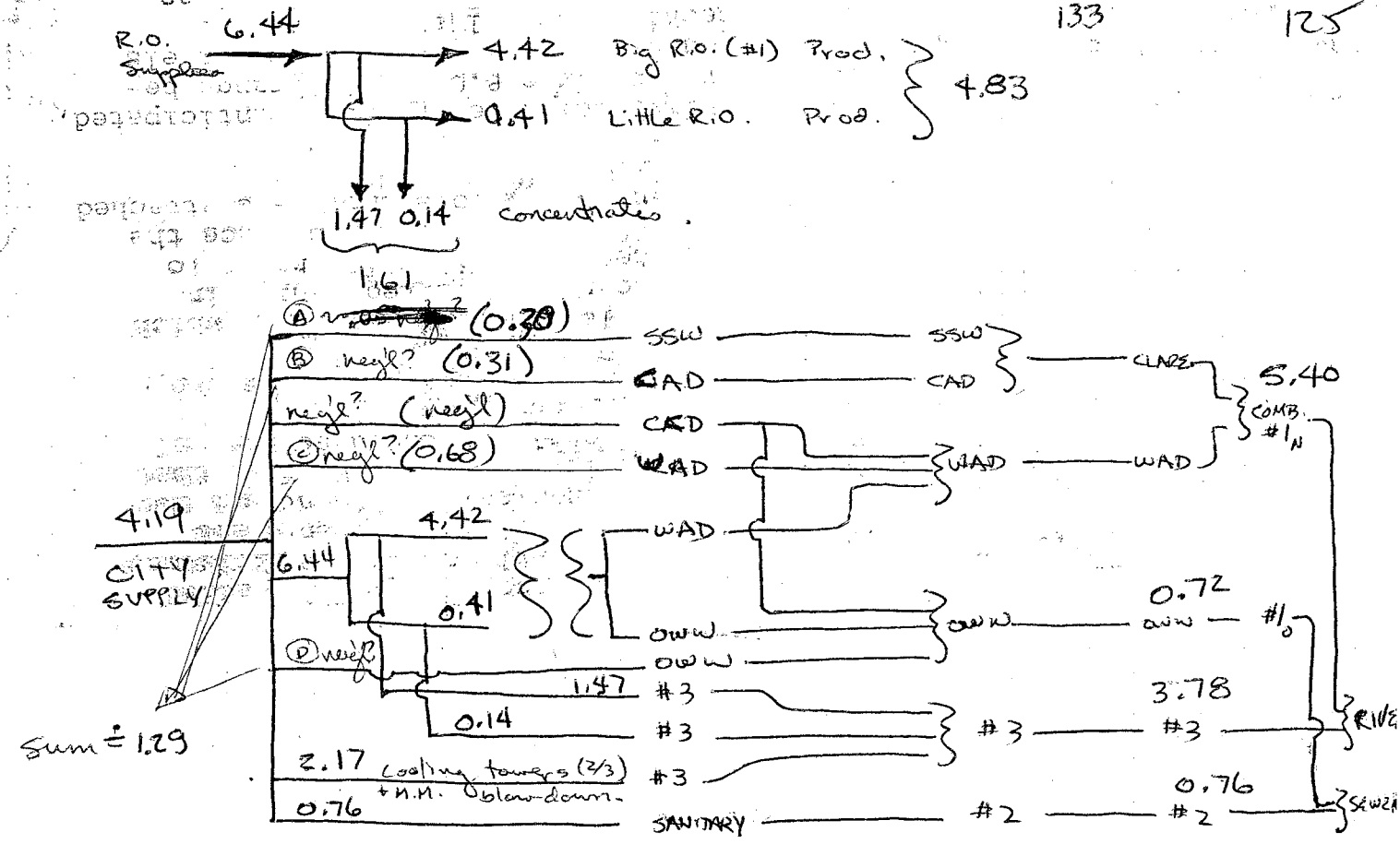
SCOEPA00035053

# WACKER SILTRONIC WATER USAGE
## JANUARY 1981




SCOEPA00035054

| | | | | | |
|---|---|---|---|---|---|
| 24% | CAD = | 45 × 5/7 = | 32 | 30.18 | 30.1 |
| 23% | SSW = | 30 | 30 | 28.20 | 28.2 |
| 53% | WAD = | 100 × 5/7 = | 71 | 66.73 | 66.7 |
| | | | ~~135~~ 133 | | 125 |




RIVER
SEWER } → 10.66

4.83 + A + B + C + ~~6.44~~ + D = 5.40 + 0.72 = 6.12

~~not possible.~~

~~known OWW > 0.72 → ? how much~~

~~as ∴ OWW > 0.72 by at least 0.32~~

~~guess was ~ 0.4 – 0.5 ? reasonable ?~~

hence to (river + sewer) is actually ~~11.2 MM~~ 10.66 million gallons from 1/1 to 1/31

hence city reads only 39.3% of use.

& R.O. consumes → 60% of total water used.

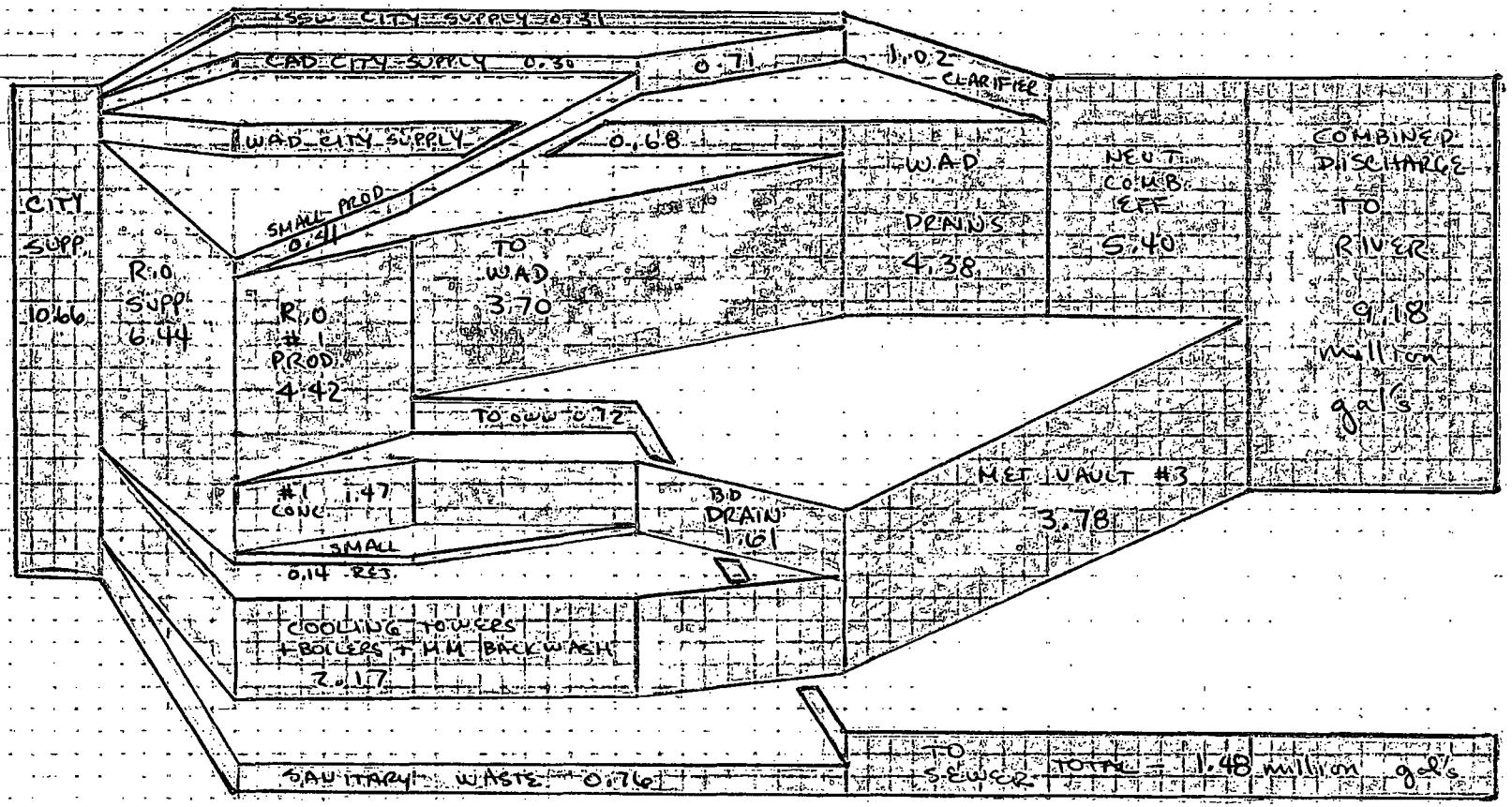
& cooling towers → 20%

& sanitaries → 7%

& other → 12%

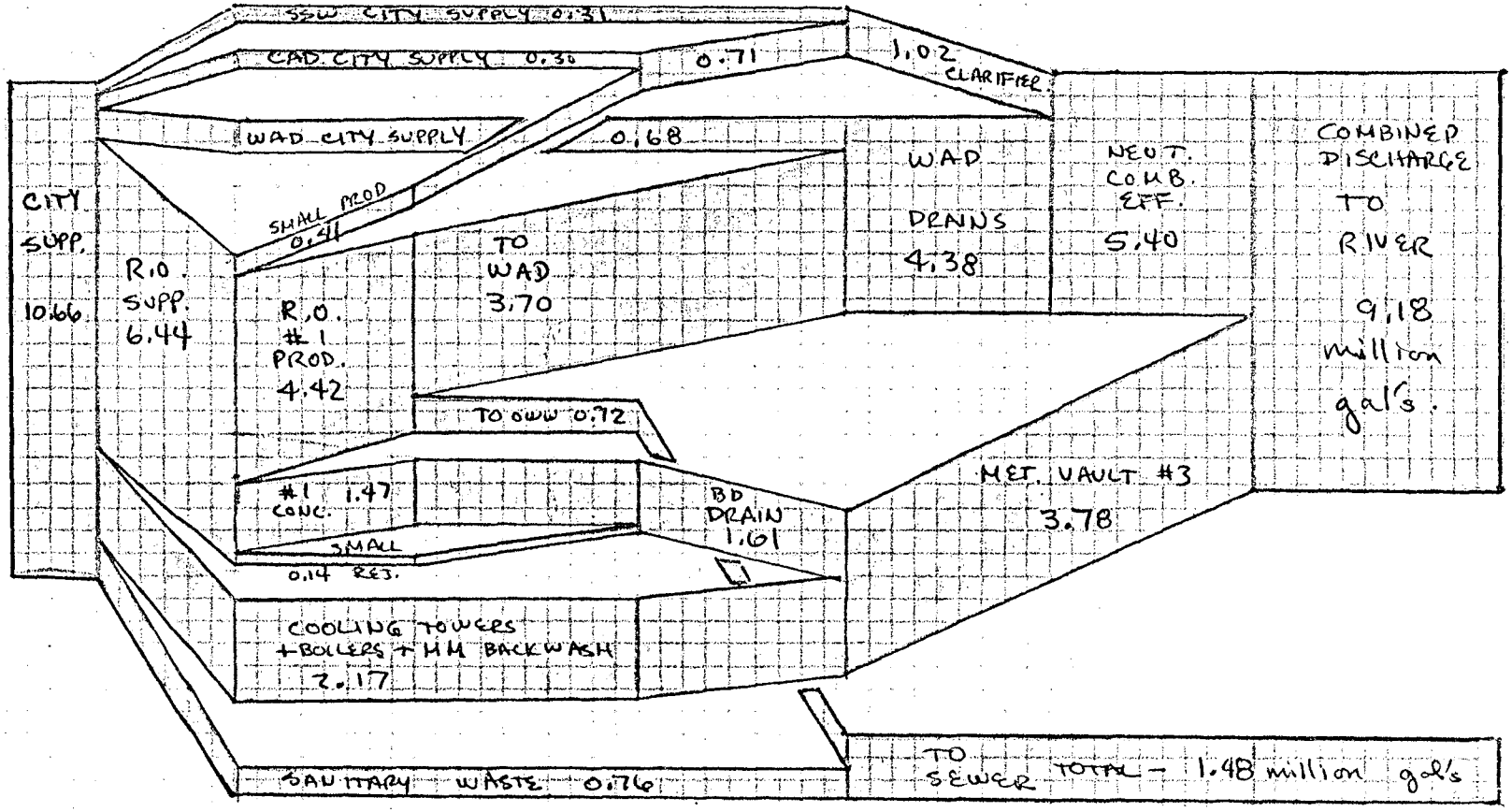
99%

# WACKER SILTRONIC WATER USAGE
## JANUARY 1981




SCOEPA00035056

# WACKER SILTRONIC WATER USAGE
## JANUARY 1981




SCOEPA00035057

EFFICIENCY® LINE 22-213

3.7854118 L/gal

MONTH: DEC.

YEAR: 1980

Wastewater Report (Columns are in mg/L and Kg/Day respectively, $m^3$/Day, and pH units/ $^oC$ )

| | | Process Flow | BOD | | TSS | | $Cr^{6+}$ | | Cr | | $F^-$ | | MV#3 Flow (X10) | $PO_4^{\equiv}$ | CD pH/T | MV3 pH/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 921.0 | | | | | | | | | | | 50.4 | | | |
| 2 | | 834.0 | | | | | | | | | | | 56.7 | | | |
| 3 | * | 867.3 | 68 | 59.0 | 4 | 3.5 | 0.001 | 8.7-4 | 0.01 | 8.7-3 | 18.3 | 15.9 | 56.1 | 0.2 | 6.4/4 | 6.8/12 |
| 4 | | 1003.9 | | | | | | | | | | | 50.0 | | | |
| 5 | | 440.4 | | | | | | | | | | | 46.2 | | | |
| 6 | | 457.8 | | | | | | | | | | | 34.2 | | | |
| 7 | | 630.5 | | | | | | | | | | | 40.7 | | | |
| 8 | | 610.0 | | | | | | | | | | | 46.2 | | | |
| 9 | | 878.1 | | | | | | | | | | | 52.9 | | | |
| 10 | * | 1013.7 | 93 | 94.3 | 58 | 5.9 | 0.002 | .002 | 0.02 | 0.02 | 10.8 | 10.9 | 45.4 | 0.2 | 7.7/19 | 7.0/14 |
| 11 | | 1108.8 | | | | | | | | | | | ↓ | | | |
| 12 | | 474.6 | | | | | | | | | | | | | | |
| 13 | | 240.6 | | | | | | | | | | | | | | |
| 14 | | 367.3 | | | | | | | | | | | | | | |
| 15 | | 556.6 | | | | | | | | | | | | | | |
| 16 | | 963.2 | | | | | | | 0.59 | | | | 25.1 | | | |
| 17 | * | 1037.7 | 66 | 68.5 | 10.6 | 11.0 | 0.001 | 0.001 | 3.63 Probe 0.014 | 0.014 | 9.6 | 9.9 | ↓ | 0.2 | 6.3/18 | 7.3/12 |
| 18 | | 944.2 | | | | | | | | | | | | | | |
| 19 | | 792.5 | | | | | | | | | | | ↓ | | | |
| 20 | | 331.1 | | | | | | | | | | | 82.5 | | | |
| 21 | | 407.9 | | RESAMPLED | | | | | | | | | ↓ | | | |
| 22 | | 977.2 | | REJECTED — | BAD | | SAMPLE | — BOTTLE | SEALED - SCALE IN | | | SAMPLE! | 50.3 | 0.2 | 6.6/13 | 6.5/13.2 |
| 23 | | 891.0 | | | ~~87~~ | | ~~0.07~~ | | ~~1.2~~ | | ~~20~~ | | — | | | |
| 24 | * | 618.7 | 107 | 66.2 | 18 | 11.1 | 0.001 | 0.0006 | 0.058 | 0.036 | 5.8 | 3.6 | 54.1 | | | |
| 25 | | 193.1 | | | | | | | | | | | 40.7 | pH | | |
| 26 | | 414.3 | | | | | | | | | | | ↓ | min max | | |
| 27 | | 268.5 | | | | | | | | | | | 45.7 | 6.3/7.7 | 6.5/8.0 | |
| 28 | | 379.4 | | | | | | | | | | | 40.5 | | 12/12.8/14 | |
| 29 | | 905.5 | | | | | | | | | | | 59.8 | min | ave max | |
| 30 | | 1036.8 | | | | | | | | | | | 42.4 | 4/ | 14/19 | |
| 31 | * | 601.8 | 85 | 51.2 | 16 | 9.6 | NOT DET. | 0 | 0.01 | .006 | 10.6 | 6.4 | 42.1 | 0.7 | | |
| | Ave. | ± 282.4 Grit 682.8 | 83.8 | 67.8 | 10.9 | 8.2 | 0.001 | 0.0009 | 0.62 | 0.35 | 11.0 | 9.3 | 46.4 | 0.3 | | |
| | Min./Max. | 193.1 / 1108.8 | 66/107 | 51.2/94.3 | 4/18 | 3.5/11.1 | 0/0.002 | 0/0.002 | 0.01/3.63 | 0.006/0.02 | 5.8/18.3 | 3.6/15.9 | 34.1/82.5 | 0.2/0.7 | | |

±13.1

SCOEPA00035058

pH –

days in violation.

| | | pH min. | pH max |
|---|---|---|---|
| * | 1 – | 5.9 | — |
| * | 2 – | 5.7 | — |
| | 3 – | — | 9.5 |
| | 4 – | 3.1 | — |
| * | 5 – | 5.6 | 9.2 |
| * | 6 – | 5.9 | — |
| * | 7 – | 5.8 | — |
| * | 8 – | 5.8 | — |
| | 9 – | ~~6~~ | 9.5 |

hence – 5 violations

| | | |
|---|---|---|
| 1 – | 5.7 | — |
| 2 – | 3.1 | — |
| 3 – | 5.6 | — |
| 4 – | — | 9.5 |
| 5 – | — | 9.5 |
| | 3.1 | 9.5 |

* note –
pH o
± 0.2 pH units
are within
instrument error
due to calibration
& drift.

also, if as usual
there is a 1:1
dilution with
pH ~7
then pH → 7 by
0.3 pH units.
combined then
the discharge to the
river can only be
shown to have had
1 violation day ⊙ ~3.4 pH

SCOEPA00035059

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR-003058-9 | 009 |

2834-5
File No. 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 12 | 01 | TO | 80 | 12 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROCESS WASTEWATER FLOW | SAMPLE MEASUREMENT | 682.8 | 1108.8 | $m^3/d$ | — | — | — | — | — | CONT | CONT |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| BOD | SAMPLE MEASUREMENT | 67.8 | 94.3 | kg/d | 6.8 | 83.8 | 107 | mg/l | 5 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TSS | SAMPLE MEASUREMENT | 8.2 | 11.1 | kg/d | 4.0 | 10.9 | 18.0 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $F^-$ | SAMPLE MEASUREMENT | 9.3 | 15.9 | kg/d | 5.8 | 11.0 | 18.3 | mg/l | 4 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.001 | 0.002 | kg/d | ~~0.01~~ | ~~0.63~~ 0.001 | ~~3.20~~ 0.002 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{TOTAL}$ | SAMPLE MEASUREMENT | 0.11 | ~~1.20~~ 0.59 | kg/d | 0.01 | 0.62 | 3.63 | mg/l | 1 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 3.1 | — | 9.5 | pH UNITS | 5 | CONT | CONT |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | | TELEPHONE | DATE |
|---|---|---|---|---|
| JOHN FITTMAN<br>DIRECTOR OF ENG | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE 243 NUMBER 2020 | YEAR MO DAY |
| TYPED OR PRINTED | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
Project for diverting stream with high organic loading to Portland Sanitary Sewer is now 90% complete with completion date 2/81 for January 16, 1981. $CH_2M$-Hill start-up engineer is currently working in plant in effort to make existing equipment consistently meet other N.P.D.E.S. limitations.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 1 OF 2

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR-003058-9 | 009 |

2834-5
File No. 93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 12 | 01 | TO | 80 | 12 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COOLING WATER & BOILER BLOWDOWN FLOW | SAMPLE MEASUREMENT | 464 | 825 | $m^3/d$ | — | — | — | — | — | 1/7 | CONT |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |
| TOTAL $PO_4$ | SAMPLE MEASUREMENT | — | — | — | 0.2 | 0.2 | 0.7 | mg/l | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 3.0 | 5.0 | | 0 | 1/7 | GRAB |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 6.3 | — | 7.7 | pH UNITS | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | 1/7 | GRAB |
| Temperature | SAMPLE MEASUREMENT | — | — | — | — | — | 19 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | 0 | 1/7 | GRAB |
| Free Available Chlorine | SAMPLE MEASUREMENT | — | — | — | ~~0~~ | ~~0~~ | ~~0~~ | mg/l | 0 | continuous Cl2 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | 0 | 1/7 | GRAB |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | | TELEPHONE | DATE |
|---|---|---|---|---|
| JOHN FITTMAN<br>DIRECTOR OF ENG | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE 243 NUMBER 2020 | YEAR MO DAY |
| TYPED OR PRINTED | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 2 OF 2

SCOEPA00035060

| | | | Nowww | PROCESS WASTE WATER | MU #2 | MW #3 | |
|---|---|---|---|---|---|---|---|
| 80 | 11 | 30 | 063171 | 882617 | 55277 | 131311 | |
| | 12 | 1 | 064348 | 892424 | 55428 | 132542 | |
| | | 2 | 067636 | 916753 | 55759 | 133875 | |
| | | 3 | 070450 | 938786 | 56266 | 135354 | |
| | | 4 | 073640 | 961703 | 56680 | 136678 | |
| | | 5 | 075786 (0350) (1450) 077080 | 988822 | — | — | |
| | | 6 | 079154 | 999857 | 57264 | 139116 | |
| | | 7 | 081308 | 011951 | 57568 | 140019 | |
| | | 8 | 083214 | 028606 | 57389 | 141093 | |
| | | 9 | 0.853560 | 447210 | 58091 | 142314 | |
| | | 10 | 947940 | 679190 | 58386 | 143711 | |
| | | 11 | 105688 | 947030 | — | — | |
| | | 12 | 117333 | 123995 | — | — | I may short everyone stretched |
| | | 13 | 122815 (0450) (1650) 123165 | 136109 / 137796 | — | — | |
| | | 14 | 124426 | 142889 | — | — | |
| | | 15 | 130435 | 152592 | — | — | |
| | | 16 | 136628 | 167293 | — | — | |
| | | 17 | 1451950 | 1977430 | 59873 | 152105 | |
| | | 18 | 1549500 | 2201530 | — | — | |
| | | 19 | 1604190 | 2450950 | — | — | |
| | | 20 | 1634740 | 2660320 | — | — | |
| | | 21 | 1646200 | 2747800 | 60317 | 154760 | |
| | | 22 | 1659150 | 2855540 | — | — | |
| M.U. #3 pH = 6.6 13°C | | 23 | 169860 | 31136.9 | 60571 | 159135 | |
| | | 24 | 172902 | 334908 | 60749 | 160464 | |
| River 6.5 pH 13.2° | | 25 | 175297 | 357255 | 60876 | 161892 | |
| | | 26 | 176148 | 356353 | — | — | |
| | | 27 | 176732 | 362199 | 61084 | 164044 | |
| | | 28 | 177988 | 369288 | 61200 | 165249 | |
| | | 29 | 179366 | 379314 | 61324 | 166320 | |
| | | 30 | 183030 | 403235 | 61533 | 167901 | |
| | | 31 | 166 16 70 (0350) 187299 (1400) | 427504 / 436865 | / 61769 | / 169029 | |
| 81 | 1 | 1 | 188533 | 446521 | 62005 | 170132 | |

SCOEPA00035061

| | COMB. DIST. | MU #3 |
|---|---|---|
| 12/3 | 4°C / 6.4 pH | 6.8 / 12°C |
| 12/10 | 19°C / 7.7 | 14°C / 7.0 pH |
| 12/17 | 18°C / 6.3 | 12.0°C / 7.3 pH |
| 12/31 | ? | ? |

SCOEPA00035062

TO Jim

FROM Dale

SUBJECT WWTP/NPDES Report DATE 12/9/80

**MESSAGE**

Attached is the NPDES Report for November. The violations are attributable to the following:

line pump failures - pH, TSS, $F^-$
line auger failures - pH, TSS, [redacted]
operator error / insufficient time - pH, TSS.
glycerin & cleaning agents in clarifier effluent - BOD

**REPLY** SIGNED

Additional lined control valve sizing & pH control inadequacies hamper flouride control.

Flow instability (non-correctable! ~~even~~ except by going to large reservoirs.) hampering control of TSS removal, flouride settling. also, lack of flow ratio control on alum & polymer caused extreme instability in floculation process when combined with flow changes.

Also, current lack of $F^-$ monitor limits.

SIGNED DATE / /

REDIFORM® 4S 471 SEND PARTS 1 AND 3 WITH CARBON INTACT - PART 3 WILL BE RETURNED WITH REPLY. POLY-PAK (50 SETS) 4P 471

DETACH AND FILE FOR FOLLOW-UP

SCOEPA00035063

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

NAME SILTRONIC

ADDRESS P.O. BOX 03180
PORTLAND, ORE. 97203
HYPER-PURE SILICON PLANT

FACILITY 7200 N.W. FRONT AVE.

LOCATION PORTLAND, ORE. 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158-R0073

(2-16) PERMIT NUMBER: OR-00305[illegible]-9

(17-19) DISCHARGE NUMBER: 008

2834-J
File #93450

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 11 | 01 | TO | 80 | 11 | 30 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling Water & Boiler Blowdown Flow. | SAMPLE MEASUREMENT | 5x00 | 12x30 | $m^3/d$ | — | — | — | — | — | M-W 1/7 | CONT. |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | M-W 1/7 | CONT. |
| Total $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | — | 0.55 | 0.7 | mg/l | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | 0 | 1/7 | GRAB |
| — | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Combined Outfall pH | SAMPLE MEASUREMENT | — | — | — | 7.1 | — | 8.5 | pH | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | UNITS | 0 | 1/7 | GRAB |
| Temp. | SAMPLE MEASUREMENT | — | — | — | — | — | 22 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | 0 | 1/7 | GRAB |
| Free Avail. Chlorine. | SAMPLE MEASUREMENT | — | — | — | ⊖ | ⊖ | ⊖ | mg/l | 0 | during chlorin | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | 0 | during chlorin | GRAB |
| — | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 503 | NUMBER 243-2020

DATE: YEAR | MO | DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*



SCOEPA00035064

PERMITTEE NAME/ADDRESS (Include Facility Name/Location/Parent)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158-R0073

NAME WACKER SILTRONIC
ADDRESS P.O. BOX 03180
PORTLAND, OREGON 97203
HYPER PURE SILICON PLANT
FACILITY 7200 N.W. FRONT AVE.
LOCATION PORTLAND, OREGON 97229

(2-16) OR-003050-9 PERMIT NUMBER

(17-19) 008 DISCHARGE NUMBER

2834-J
File #93450

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 11 | 01 | TO | 80 | 11 | 30 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater FLOW | SAMPLE MEASUREMENT | 607.5 | 901.1 | $m^3/d$ | — | — | — | — | — | CONT. | CONT |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | CONT | CONT |
| BOD | SAMPLE MEASUREMENT | 45.2 | 65.6 | kg/d | 5 | 64.2 | 91.6 | mg/l | 3 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24HC |
| TSS | SAMPLE MEASUREMENT | 23.3 ~~11.6~~ | 37.8 ~~20.0~~ | kg/d | 4 | 32.4 | 46.5 | mg/l | 3 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24HC |
| $F^-$ | SAMPLE MEASUREMENT | 11.6 ~~7.1~~ | 20.0 ~~11.6~~ | kg/d | 8.8 | 16.4 | 27.9 | mg/l | 4 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6 | 20 | | 0 | 1/7 | 24HC |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.002 | 0.003 | kg/d | 0.001 | 0.003 | 0.006 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.01 | 0.05 | | ~~0.02~~ | 0.02 | 0.05 | | 0 | 1/7 | 24HC |
| $Cr^{total}$ | SAMPLE MEASUREMENT | 0.008 | 0.016 | kg/d | 0.001 | 0.011 | 0.020 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.2 | 0.5 | | — | 0.3 | 1.0 | | 0 | 1/7 | 24HC |
| pH | SAMPLE MEASUREMENT | — | — | — | 2.7 | — | 11.4 | pH UNITS | 9 | CONT. | CONT |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | CONT. | CONT |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

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SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 503 NUMBER 243-2020

DATE: YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

10/29

CD
21°C/7.0

MW#3
16°C/7.0

| | NOWW | Clare + WAD | #2 | #3 | | |
|---|---|---|---|---|---|---|
| 10/31 | 890434 | 410968 17950 | 57802 | 93193 | | |
| 11/1 | 897111 | 428918 6866 | 51885 | 93287 | | |
| 2 | 898836 | 435784 13914 | 51904 | 93483 | | |
| 3 | 902764 | 449698 19421 | 51934 | 96738 | | |
| 4 | 912243 | 469119 18500 | 52070 | 97944 | Billy W. missed (22°C/7.1 George got. 17°/7.4) | |
| 5 | 921597 | 487119 21330 | 52181 | 99302 | | |
| 6 | 931011 | 508449 22847 | 2419 | 100487 | | |
| 7 | 939978 | 531296 13018 | — | — | | |
| 8 | 0300 944459 1600 945707G | 542c10 560180 | — | — | | |
| 9 | — | — | — | — | | |
| 10 | 950226 | 560981 17434 | 53229 | 106356 | | |
| 11 | 958924 | 578415 23805 | 53371 | 107681 | | |
| 12 | 966737 | 602220 21701 | 53435 | 108872 | 19°C/7.4 | 14°C/7.1 |
| 13 | 973830 | 623921 18671 | 53488 | 110367 | | |
| 14 | 981036 | 642592 17963 | 53591 | 111591 | | |
| 15 | 987716 | 660555 8247 | — | — | | |
| 16 | 989729 | 668802 12118 | — | — | | |
| 17 | 993168 | 680920 17750 | — | — | | |
| 18 | 000406 | 698670 21925 | 053770 | 116559 | | |
| 19 | 010093 | 720595 18925 | 53884 | 117918 | 18°C/7.2 | 14°C/7.0 |
| 20 | 019810 | 739520 20419 | 54049 | 119229 | | |
| 21 | 0299580 | 759939 16054 | 54217 | 120629 | | |
| 22 | 036310 | 775993 8942 | 54389 | 121938 | | |
| 23 | 037888 | 782935 11203 | 54393 | — | | |
| 24 | 042910 | 794138 22044 | 5440 8 | — | | |
| 25 | 051311 | 816182 23257 | 54487 | 125500 | | |
| 26 | 057668 | 839433 15266 | 54633 | 126870 | (17°/8.5 | 12°C/8.3) |
| 27 | 059601 | 854659 8894 | 54807 | 128103 | | |
| 28 | 060336 | 883553 14206 | 54921 | 129168 | | |
| 29 | 062674 497 | 877759 4858 | 55151 | 130377 | | |
| 30 | 063171 | 882617 | 55277 | 131311 | | |
| 12/1 | 064348 1177 | 892424 9807 | 55428 | 132542 | | |
| 2 | | | | | | |
| 3 | | | | | 4°C/6.4 | 12°C/6.8 |

SCOEPA00035066

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

(2-16) PERMIT NUMBER: OR-00305[illegible]-J

(17-19) DISCHARGE NUMBER: 008

2834-J
File #93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 11 | 01 | TO | 80 | 11 | 30 |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater Flow | SAMPLE MEASUREMENT | 607.5 | 901.1 | $m^3/d$ | — | — | — | — | — | CONT | CONT |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| BOD | SAMPLE MEASUREMENT | 45.2 | 65.6 | Kg/d | 5 | 64.2 | 91.6 | mg/l | 3 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| TSS | SAMPLE MEASUREMENT | ~~25.5~~ 46 | ~~36.0~~ | Kg/d | 4 | 32.4 | 46.5 | mg/l | 3 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $F^-$ | SAMPLE MEASUREMENT | ~~11.6~~ 7.4 | ~~20.0~~ 46 | Kg/d | 8.8 | 16.4 | 27.9 | mg/l | 4 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.002 | 0.003 | Kg/d | 0.001 | 0.003 | 0.006 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Cr total | SAMPLE MEASUREMENT | 0.008 | 0.016 | Kg/d | 0.001 | 0.011 | 0.020 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 2.7 | — | 11.4 | pH UNITS | 9 | CONT. | CONT |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| JOHN FITTIMAN<br>DIR OF ENG | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE 503 / NUMBER 243-2020 | YEAR | MO | DAY |
| TYPED OR PRINTED | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

B.O.D. violations as described in memo to D.E.Q. from J.R. Ellis dated 7/30/80. Have determined that above-mentioned violations for pH, TSS and F are due to, in part, to unexpected acidity surges from one section of the process. Instrumentation changes and/or more waste surge capacity may be necessary to correct this problem.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 1 OF 2

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
**DISCHARGE MONITORING REPORT** *(DMR)*

*Form Approved OMB No. 158-R0073*

(2-16) PERMIT NUMBER: OR-00305[illegible]-J

(17-19) DISCHARGE NUMBER: 008

2834-J
File #93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 11 | 01 | TO | 80 | 11 | 30 |

**NOTE:** Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling Water & Boiler Blowdown Flow | SAMPLE MEASUREMENT | 5,00 | 12,30 | $m^3/d$ | — | — | — | — | — | 1/7 | CONT. |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Total $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | — | 0.55 | 0.7 | mg/l | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 2.6 | 5.0 | | 0 | 1/7 | GRAB |
| — | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Combined Acid Cell pH | SAMPLE MEASUREMENT | — | — | — | 7.1 | — | 8.5 | pH UNITS | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | 1/7 | GRAB |
| Temp. | SAMPLE MEASUREMENT | — | — | — | — | — | 22 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | | | GRAB |
| Free Avail. Chlorine. | SAMPLE MEASUREMENT | — | — | — | ⊖ | ⊖ | ⊖ | mg/l | 0 | during chlorin. | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | 0 | 1/7 | GRAB |
| — | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| JOHN FITTIMAN<br>DIR OF ENG | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE 503 / NUMBER 243-2020 | YEAR | MO | DAY |
| TYPED OR PRINTED | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 2 OF 2

SCOEPA00035067

| | | gal/m³ | ppm/kg/day BOD | TSS | $F^-$ | $Cr^{6+}$ | $Cr^T$ | $PO_4^{\equiv}$ |
|---|---|---|---|---|---|---|---|---|
| 5 | 487119 – 508449 | 213,300 | 5 | 4 | 8.8 | .002 | .004 | 0.7 |
| | | 807.4 | 4.0 | 3.2 | 7.1 | .002 | .003 | 0.6 |
| 12 | 602220 – 623921 | 217,010 | 77 | 46 | 11 | .002 | .02 | 0.6 |
| | | 821.5 | 63.3 | 37.8 | 9.0 | .002 | .016 | 0.5 |
| 19 | 720595 – 739520 | 189,350 | 91.6 | 46.5 | 27.9 | .001 | .001 | 0.5 |
| | | 716.4 | 65.6 | 33.3 | 20.0 | .001 | .001 | 0.4 |
| 26 | 839433 – 854659 | 152,260 | 83 | 33 | 18 | .006 | .019 | 0.4 |
| | | 576.4 | 47.8 | 19.0 | 10.4 | .003 | .011 | 0.2 |
| | Ave | 730.4 | 64.2 | 32.4 | 16.4 | .003 | 0.011 | 0.55 |
| | | | 45.2 | 23.3 | 11.6 | .002 | 0.008 | 0.4 |

pump failure
auger failure
} both caused by line control problems.

min. →
max. →

| pH | violation days |
|---|---|
| 1 | 5.6 |
| 2 | 3.0 |
| 3 | 2.7 |
| 4 | 11.4 |
| 5 | 3.3/10.3 |
| 6 | 2.7/10.7 |
| 7 | 9.6 |
| 8 | 9.9 |
| 9 | 10.1 |

Facility Name/Location if different)

NAME WACKER SILTRONIC
ADDRESS P.O. BOX 03180
PORTLAND, ORE. 97203
HYPER-PURE SILICON PLANT
FACILITY 7200 N.W. FRONT AVE.
LOCATION PORTLAND, ORE. 97229

# DISCHARGE MONITORING REPORT (DMR)

OMB No. 158 - R00

(2-16) PERMIT NUMBER: OR0030[illegible]-9

(17-19) DISCHARGE NUMBER: 007

2834-J
File #93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 10 | 1 | TO | 80 | 10 | 31 |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPL TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FLOW | SAMPLE MEASUREMENT | — | — | — | — | 617.0 | 895.9 | $m^3/d$ | — | CONT. | CONT |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | CONT. | CONT |
| BOD | SAMPLE MEASUREMENT | 26.2 | 33.3 | Kg/d | 26 | 36 | 46 | mg/l | 5 | 1/7 | 24H |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24H |
| TSS | SAMPLE MEASUREMENT | 11.4 | 18.2 | Kg/d | 2.1 | 15.6 | 27 | mg/l | 0 | 1/7 | 24H |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24H |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.003 | 0.008 | Kg/d | <0.001 | 0.004 | 0.009 | mg/l | 0 | 1/7 | 24H |
| | PERMIT REQUIREMENT | 0.01 | 0.05 | | — | 0.02 | 0.05 | | 0 | 1/7 | 24H |
| $Cr^{total}$ | SAMPLE MEASUREMENT | 0.014 | 0.04 | Kg/d | 0.009 | 0.018 | ~~0.012~~ 0.05 | mg/l | 0 | 1/7 | 24H |
| | PERMIT REQUIREMENT | 0.2 | 0.5 | | — | 0.3 | 1.0 | | 0 | 1/7 | 24H |
| $F^-$ | SAMPLE MEASUREMENT | 4.7 | 5.7 | Kg/d | 5.0 | 6.4 | 8.0 | mg/l | 0 | 1/7 | 24H |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6 | 20 | | 0 | 1/7 | 24H |
| pH. | SAMPLE MEASUREMENT | — | — | — | 5.0 | — | 11.8 | pH UNITS | 6 | CONT. | CONT |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | CONT. | CONT |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.) | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DA |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

B.O.D. violation is described in memo to D.E.Q. from J.R. Ellis dated 7/30/80. Project is underway to divert high B.O.D. in-plant stream to City of Portland sanitary sewer to alleviate river discharge violation. pH violations can be eliminated by control modifications in neutralization process.

EPA Form 3320 [illegible] 10-77) PREVIOUS EDITION TO BE USED (REPLACES EPA [illegible]-40 WHICH MAY NOT BE USED.) PAGE OF

SCOEPA00035069

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

NAME WACKER SILTRONIC
ADDRESS P.O. BOX 03180
PORTLAND, ORE. 97203
HY PER-PURE SILICON PLANT
FACILITY 7200 N.W. FRONT AVE.
LOCATION PORTLAND, ORE. 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

# DISCHARGE MONITORING REPORT (DMR)

FORM APPROVED OMB No. 158-R00

(2-16) PERMIT NUMBER: OR003058-9

(17-19) DISCHARGE NUMBER: 007

2834-J
File No. 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 90 | 10 | 1 | TO | 90 | 10 | 31 |

NOTE: Read Instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COOLING WATER AND BOILER BLOWDOWN. TOTAL $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | 0.1 | 0.35 | 0.7 | mg/l | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | 0 | 1/7 | GRAB |
| FLOW | SAMPLE MEASUREMENT | | | $m^3/d$ | — | — | — | | — | 1/7 | CONT |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | 1/7 | CONT |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 7.3 | — | 8.6 | pH UNITS | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | 1/7 | GRAB |
| TEMP. | SAMPLE MEASUREMENT | — | — | — | — | — | 18 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | 0 | 1/7 | GRAB |
| Free Avail. $Cl_2$ | SAMPLE MEASUREMENT | — | — | — | 0.0 | 0.0 | 0.0 | mg/l | 0 | during chlorin. | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | 0 | during chlorin. | GRAB |
| — | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | | TELEPHONE | DATE |
|---|---|---|---|---|
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE / NUMBER | YEAR / MO / DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)



SCOEPA00035070

EFFICIENCY® LINE 22-213

Sept. 80

| | high | low |
|---|---|---|
| ① | 10.5 | — |
| ② | — | 2.8 |
| ③ | 11.2 | 5.2 |
| ④ | 9.5 | — |
| ⑤ | — | 2.5 |

5 viola feed damp

| | Process W.W. Flow to River | | BOD ppm | BOD lag/d | TSS | | $F^-$ | | $Cr^{6+}$ | | $Cr^{total}$ | | $PO_4^{\equiv}$ | pH to river | Flow MET. VAULT #3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ~~JAN~~ | ~~FEB~~ | ~~MAR~~ | ~~APR~~ | ~~MAY~~ | ~~JUN~~ | ~~JUL~~ | ~~AUG~~ | ~~SEP~~ | ~~OCT~~ | ~~NOV~~ | ~~DEC~~ | ~~TOTAL~~ gal |
| 1 | 16415 gal | 621.4 $m^3$ | | | | | | | | | | | | | |
| 2 | 242860 | 939.8 | | | | | | | | | | | | | |
| 3 | 207640 | 786.0 | 77 | 61 | 5 | 3.9 | 15 | 11.8 | 0.001 | .0008 | 0.01 | .008 | 0.4 | ~~0.3~~ | |
| 4 | 189170 | 716.1 | | | | | | | | | | | | | |
| 5 | — | — | | | | | | | | | | | | | |
| 6 | — | — | | | | | | | | | | | | | |
| 7 | (255500) | (967.2) | | | | | | | | | | | | | |
| 8 | 222030 | 840.5 | | | | | | | | | | | | | |
| 9 | 301740 | 1142.2 | | | | | | | | | | | | | |
| 10 | 160780 | 608.6 | 17 | 10.3 | 32 | 19.5 | 8 | 4.9 | 0.03 | 0.02 | 0.04 | 0.02 | 0.04 | | |
| 11 | 220010 | 832.8 | | | | | | | | | | | | | |
| 12 | — | — | | | | | | | | | | | | | |
| 13 | — | — | | | | | | | | | | | | | |
| 14 | (461270) | (1746.1) | | | | | | | | | | | | | |
| 15 | 382850 | 1449.2 | | | | | | | | | | | | | |
| 16 | 204370 | 773.6 | | | | | | | | | | | | | |
| 17 | 198600 | 751.8 | | | | | | | | | | | | | |
| 18 | 152100 | 575.8 | 4 | 2.3 | 35 | 20.2 | 13 | 7.5 | 0.006 | .003 | 0.01 | .006 | 0.3 | | |
| 19 | — | — | | | | | | | | | | | | | |
| 20 | — | — | | | | | | | | | | | | | |
| 21 | (415020) | (1571.0) | | | | | | | | | | | | | |
| 22 | 193970 | 734.3 | | | | | | | | | | | | | |
| 23 | 173720 | 657.6 | | | | | | | | | | | | | |
| 24 | 149210 | 564.8 | 32 | 18.1 | 3 | 1.7 | 11 | 6.2 | 0.007 | 0.004 | 0.02 | 0.01 | 3.3 | | 127000 |
| 25 | 179520 | 679.6 | | | | | | | | | | | | | 128800 |
| 26 | — | — | | | | | | | | | | | | | — |
| 27 | — | — | | | | | | | | | | | | | — |
| 28 | (366760) | (1388.3) | | | | | | | | | | | | | — |
| 29 | 202820 | 767.8 | | | | | | | | | | | | | — |
| 30 | 162190 | 614.0 | | | | | | | | | | | | | 10/1 185900 |
| 31 | | | | | | | | | | | | | | | |
| TOTAL | 5206280 | 19707.9 | 130 | 91.7 | 75 | 45.3 | 47 | 30.4 | 0.044 | 0.0278 | 0.08 | 0.044 | 4.04 | | ~~441,700 (stamp)~~ |
| AVG | 173543 | 656.9 | 32.5 | 22.9 | 18.8 | 11.3 | 11.8 | 7.6 | 0.011 | 0.007 | 0.02 | 0.011 | 1.01 | | ~~55,213 GPD~~ |

SCOEPA00035071

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

NAME: WACKER SILTRONIC CORP.
ADDRESS: P.O. BOX 83180
PORTLAND ORE. 97203
HYPER-PURE SILICON PLANT
FACILITY: 7200 N.W. FRONT AVE.
LOCATION: PORT. ORE. 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158 - R007

(2-16) OR0030 5-9 PERMIT NUMBER
(17-19) 006 DISCHARGE NUMBER

2834-5
FILE # 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 9 | 1 | TO | 80 | 9 | 30 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow | SAMPLE MEASUREMENT | — | — | — | 565 | 657 | 1449 | $m^3/d$ | — | CONT | CONT |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | CONT. | CONT |
| BOD | SAMPLE MEASUREMENT | 22.9 | 61 | Kg/d | 4 | 32.5 | 77 | mg/l | 1 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24HC |
| TSS | SAMPLE MEASUREMENT | 11.3 | 20.2 | Kg/d | 5 | 18.8 | 35 | mg/l | 2 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24HC |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.007 | 0.02 | Kg/d | 0.001 | 0.01 | 0.03 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.01 | 0.05 | | — | 0.02 | 0.05 | | 0 | 1/7 | 24HC |
| $Cr_{total}$ | SAMPLE MEASUREMENT | 0.01 | 0.02 | Kg/d | 0.01 | 0.02 | 0.04 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.2 | 0.5 | | — | 0.3 | 1.0 | | 0 | 1/7 | 24HC |
| $F^-$ | SAMPLE MEASUREMENT | 7.6 | 11.8 | Kg/d | 8 | 11.8 | 15 | mg/l | 1 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6 | 20 | | 0 | 1/7 | 24HC |
| PH | SAMPLE MEASUREMENT | — | — | — | 2.5 | — | 11.2 | PH UNITS | 5 | CONT | CONT |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | CONT | CONT |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
JOHN PITTMAN
DIR OF ENGR.
TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

John Pittman
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE | NUMBER

DATE: YEAR | MO | DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Violations indicated above are result of new plant and start-up problems. Specific problems are reviewed in memo to D.E.Q. from J.R. Ellis dated 7/30/80.



SCOEPA00035072

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158 - R007.

| | |
|---|---|
| NAME | SILTRONIC CORP |
| ADDRESS | P.O. BOX 03180 |
| | PORT ORE 97203 |
| | HYPERPURE SILICON PLANT |
| FACILITY | 7200 N.W. FRONT AVE |
| LOCATION | PORT ORE 97229 |

| (2-16) | (17-19) |
|---|---|
| OR 0030 8-9 | 006 |
| PERMIT NUMBER | DISCHARGE NUMBER |

2834-J
File # 93450

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 9 | 1 | TO | 80 | 9 | 30 |
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read Instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling water & Boiler BD Total $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | mg/l | 0.04 | 1.0 | 3.3 | mg/l | | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | 0 | 1/7 | GRAB |
| Flow | SAMPLE MEASUREMENT | 27.9 ~~20.9~~ * | 43.2 * | $m^3/d$ | — | — | — | — | — | 1/7 | CONT |
| | PERMIT REQUIREMENT | | | | — | — | — | | — | 1/7 | CONT |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Combined Outfall pH | SAMPLE MEASUREMENT | — | — | — | 6.9 | — | 8.2 | pH | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | UNITS | 0 | 1/7 | GRAB |
| Temp | SAMPLE MEASUREMENT | — | — | — | — | — | 25 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | 0 | 1/7 | GRAB |
| Free Avail Chlorine | SAMPLE MEASUREMENT | — | — | — | 0 | 0 | 0 | mg/l | 0 | during chlorine | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | 0 | during chlorine | GRAB |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.) | John Pittman | TELEPHONE | DATE |
|---|---|---|---|---|
| JOHN PITTMAN DIR OF ENGR | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE / NUMBER | YEAR / MO / DAY |
| TYPED OR PRINTED | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

* - these data represent only a partial month. - the considerable difference in flow from last month is real & is attributable to cooler daily temperatures. The integrator on this device was made operational in mid month.

PA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE OF

SCOEPA00035073

TO Jim Ellis

FROM Dick D

SUBJECT NPDES Report

DATE 10/13/80

**MESSAGE**

Cause of violations this month are the same as last, namely pH control inadequacies & resultant problems with flocculation in combination with high BOD due to glycerine. (Lapping) Fluoride still consistent and high.

SIGNED Dick D

**REPLY**

SIGNED

DATE / /

REDIFORM® 4S 471

SEND PARTS 1 AND 3 WITH CARBON INTACT - PART 3 WILL BE RETURNED WITH REPLY.

POLY PAK (50 SETS) 4P 471

DETACH AND FILE FOR FOLLOW-UP

SCOEPA00035074

Facility Name/Location if different)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158 - R0073

NAME WACKER SILTRONIC CORP.
ADDRESS P.O. BOX 03180
PO ORE 97203
HYPERPURE SILICON PLANT
FACILITY 7200 N.W. FRONT AVE
LOCATION PORT ORE 97229

(2-16) OR 0030 3-9 — PERMIT NUMBER
(17-19) 006 — DISCHARGE NUMBER

2834-J
File # 93450

MONITORING PERIOD

| FROM | YEAR (20-21) | MO (22-23) | DAY (24-25) | TO | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| | 80 | 9 | 1 | | 80 | 9 | 30 |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling Water & Boiler BD Total $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | mg/l | 0.04 | 1.0 | 3.3 | mg/l | | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | 0 | 1/7 | GRAB |
| Flow | SAMPLE MEASUREMENT | 27.9 ~~20.9~~ * | 43.2 * | $m^3/d$ | — | — | — | — | — | 1/7 | CONT |
| | PERMIT REQUIREMENT | | | | — | — | — | | — | 1/7 | CONT |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Combined Outfall pH | SAMPLE MEASUREMENT | — | — | — | 6.9 | — | 8.2 | pH | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | UNITS | 0 | 1/7 | GRAB |
| Temp | SAMPLE MEASUREMENT | — | — | — | — | — | 25 | °C | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | 0 | 1/7 | GRAB |
| Free Avail Chlorine | SAMPLE MEASUREMENT | — | — | — | 0 | 0 | 0 | mg/l | 0 | during chlorine | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | 0 | during chlorine | GRAB |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE — AREA CODE — NUMBER

DATE — YEAR — MO — DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)

* – these data represent only a partial month. – the considerable difference in flow from last month is real & is attributable to cooler daily temperatures. The integrator on this device was made operational in mid month.

Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

SCOEPA00035075

Form Approved
OMB No. 158 - R007

# DISCHARGE MONITORING REPORT (DMR)

2834-5
FILE # 93450

NAME ELKEM SILICONIC CORP.
ADDRESS P.O. BOX 03180
PORTLAND ORE 97203
HYPER-PURE SILICON PLANT
FACILITY 7200 N.W. FRONT AVE.
LOCATION PORTLAND ORE 97229

(2-16) PERMIT NUMBER: OR0030[illegible]3-9
(17-19) DISCHARGE NUMBER: 0006

MONITORING PERIOD
FROM: YEAR (20-21) 80, MO (22-23) 9, DAY (24-25) 1
TO: YEAR (26-27) 80, MO (28-29) 9, DAY (30-31) 30

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow | SAMPLE MEASUREMENT | — | — | — | 565 | 657 | 1449 | $m^3/d$ | — | CONT | CONT |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | CONT | CONT |
| BOD | SAMPLE MEASUREMENT | 22.9 | 61 | Kg/d | 4 | 32.5 | 77 | mg/l | 1 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24HC |
| TSS | SAMPLE MEASUREMENT | 11.3 | 20.2 | Kg/d | 5 | 18.8 | 35 | mg/l | 2 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | 1/7 | 24HC |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.007 | 0.02 | Kg/d | 0.001 | 0.01 | 0.03 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.01 | 0.05 | | — | 0.02 | 0.05 | | 0 | 1/7 | 24HC |
| $Cr^{total}$ | SAMPLE MEASUREMENT | 0.01 | 0.02 | Kg/d | 0.01 | 0.02 | 0.04 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 0.2 | 0.5 | | — | 0.3 | 1.0 | | 0 | 1/7 | 24HC |
| $F^-$ | SAMPLE MEASUREMENT | 7.6 | 11.8 | Kg/d | 8 | 11.8 | 15 | mg/l | 1 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6 | 20 | | 0 | 1/7 | 24HC |
| pH | SAMPLE MEASUREMENT | — | — | — | 2.5 | — | 11.2 | pH UNITS | 5 | CONT | CONT |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | CONT | CONT |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER — TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE — AREA CODE — NUMBER

DATE — YEAR — MO — DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*



SCOEPA00035076

| | ~~C.C.~~ RIVER | #3 |
|---|---|---|
| 9/3 | 6.9/4(21) | 6.9/32 |
| 9/10 | 7.0/25 | 7.4/21 |
| 9/18 | 7.9/23 | 6.2/21 |
| 9/24 | 8.2/21 | 8.0/20 |

Daily charge

| | NOW W x10 | CWB to RIVER x10 | #2 x100 | #3 x100 |
|---|---|---|---|---|
| 9/1 | 5265 | 16415 | 23 | |
| 2 | 7251 | 24286 | 64 | |
| 3 | 7421 | 20764 | 94 | |
| 4 | 8865 | 18917 | 77 | |
| 5 | — | — | — | |
| 6 | — | — | — | |
| 7 | (321) | (25550) | (81) | |
| 8 | 7238 | 22203 | 80 | |
| 9 | 4911 | 30174 | 124 | |
| 10 | 11083 | 16078 | 88 | |
| 11 | 8618 | 22001 | 175 | |
| 12 | — | — | — | |
| 13 | — | — | — | |
| 14 | (10948) | (46127) | (137) | |
| 15 | 11261 | 38285 | 168 | INOP |
| 16 | 6676 | 20437 | 63 | INOP |
| 17 | 7843 | 19860 | 95 | 3964 |
| 18 | 7727 | not 15210 | -0- | -0- |
| 19 | — | — | — | — |
| 20 | — | — | — | — |
| 21 | (18214) | (41502) | (147) | -0- |
| 22 | 8691 | 19397 | 94 | — |
| 23 | 8632 | 17372 | 94 | (16750) ?! |
| 24 | 8077 | min 14921 | 200 | 1270 |
| 25 | 9197 | 17952 | 113 | 1288 |
| 26 | — | — | — | — |
| 27 | — | — | — | — |
| 28 | (11607) | (36676) | — | — |
| 29 | 8918 | 20252 | — | — |
| 30 | 93900 | 16219 | — | — |
| | | | 10% (309) | (1859) |
| | 199121 (0) | 520628 (0) | 2128 (00) | 4417 (00) |
| ÷30 = | 66374 gal/day | 17354 gal/day | 7093 gal/day | 55213 gal/day |

Commence readings

6 days

| | NOWW | RIVER | #2 | #3 |
|---|---|---|---|---|
| 30 | | | | |
| 10/1 | 6860680 | 9073840 | — | — |
| 2 | 6954580 | 9236030 | — | — |
| 3 | 7050910 | 9401130 | 50319 | 52967 |
| 4 | 7121890 | 9597930 | 50360 | 59059 |
| 5 | | | | |
| 6 | 722085 | 984650 | 50416 | 62542 |
| 7 | 731162 | 007154 | 50515 | 64016 |
| 8 | 739794 | 029191 | 50578 | 65355 |
| 9 | 747952 | 048632 | 50649 | 66489 |
| 10 | 755489 | 069408 | 50792 | 67585 |
| 11 | | | | |
| 12 | | | | |
| 13 | 77770 ~~768291~~ | ~~11020000~~ ~~11601~~ | 50783 | 71198 |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |
| 28 | | | | |
| 29 | | | | |
| 30 | | | | |
| 31 | | | | |

Reading (tens of gallons) (hundreds of gallons)

| | NOWN | RIVER | # 2 | # 3 | |
|---|---|---|---|---|---|
| 8/31 | 5059700 | 13977780 | — | — | |
| 9/1 | 510995 | 1402975 | 48191 | — | |
| 2 | 516260 | 1419390 | 48214 | | busted |
| 3 | 523511 | 443676 | 48278 | | |
| 4 | 530932 | 464440 | 48374 | | |
| 5 | 539797 | 483357 | 48451 | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | 545118 | 508907 | 48532 | 15473 | |
| 9 | 552356 | 531110 | 48612 | 15473 | |
| 10 | 557267 | 561284 | 48736 | " | |
| 11 | 568350 | 577362 | 48824 | " | |
| 12 | 576968 | 599363 | 48999 | " | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | 587916 | 645490 | 49136 | 16000 | |
| 16 | 599177 | 683775 | 49304 | IN. OP. | |
| 17 | 605853 | 704212 | 49367 | 27871 | |
| 18 | 613696 | 724072 | 49462 | 31835 | |
| 19 | 621423 | 739282 | 49462 | 31835 | |
| 20 | {630946 | 780784 | 49609 | 31835} | |
| 21 | | | | | |
| 22 | {639637 | 800181 | 49703 | —} | |
| 23 | | | | | |
| 24 | 648269 | 817553 | 49797 | 48550 | |
| 25 | 656346 | 832474 | 49897 | 49820 | |
| 26 | 665543 | 850426 | 50010 | 51108 | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | 6771500 | 8871020 | — | — | |
| 30 | 6860680 | 9073840 | — | — | |
| 10/1 | 6954580 | 9236030 | — | — | |
| 2 | 7050910 | 9410130 | 50319 | 52967 | |

TO Jim Ellis.

FROM [signature]

SUBJECT NPDES Report

DATE 9/12/80

**MESSAGE**

Attached is this months NPDES data (due 9/15/80) the meter vault #3 flow is again estimated like last month. The BOD violations are as last month. The TSS violations are due to pH shock & the pH violations are due to the nature of the control scheme.

SIGNED [signature]

**REPLY**

SIGNED

DATE / /

REDIFORM® 4S 471

SEND PARTS 1 AND 3 WITH CARBON INTACT - PART 3 WILL BE RETURNED WITH REPLY.

POLY PAK (50 SETS) 4P 471

DETACH AND FILE FOR FOLLOW-UP

SCOEPA00035081

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME
ADDRESS
FACILITY
LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)
**DISCHARGE MONITORING REPORT (*DMR*)**

*Form Approved*
*OMB No. 158 - R007*

(2-16) PERMIT NUMBER
(17-19) DISCHARGE NUMBER

MONITORING PERIOD

| FROM YEAR (20-21) | MO (22-23) | DAY (24-25) | TO YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|
| 90 | 2 | 1 | 90 | 8 | 31 |

NOTE: Read Instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling water & Boiler Blowdown Total Flow | SAMPLE MEASUREMENT | – | – | – | 0.09 | – | 50 | MGD | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | – | – | | – | – | – | | 0 | | |
| FLOW | SAMPLE MEASUREMENT | 246 | 418 | $m^3$/day | – | – | – | – | – | est. | record |
| | PERMIT REQUIREMENT | – | – | | – | – | – | | – | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Combined outfall pH | SAMPLE MEASUREMENT | – | – | – | 6.9 | – | 9.0 | PH UNITS | | 1/7 | GRAB |
| | PERMIT REQUIREMENT | – | – | | – | – | – | | | | |
| TEMP | SAMPLE MEASUREMENT | – | – | – | 15 | – | 20 | °C | | 1/7 | GRAB |
| | PERMIT REQUIREMENT | – | – | | – | – | – | | | | |
| Free Avail Chlorine | SAMPLE MEASUREMENT | – | – | – | 0 | 0 | 0 | MG/L | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | – | – | | – | – | – | | 0 | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DAY |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)

The reported flow figure above is an estimate based on pump capacity and time of operation. Actual flow not known.

Ave 450 gpm out. => 246 $m^3$/day
Max 100 GPM for 16 hrs. 5 days/wk => 418 $m^3$/day

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PAGE OF

SCOEPA00035082

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)

# DISCHARGE MONITORING REPORT (*DMR*)

*Form Approved*
*OMB No. 158 - R007*

(2-16) PERMIT NUMBER: OR-002[illegible]

(17-19) DISCHARGE NUMBER: 002

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 12 | 1 | TO | 80 | 12 | 31 |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROCESS WASTEWATER FLOW | SAMPLE MEASUREMENT | 598.0 | 1286.2 | $m^3$/day | — | — | — | — | — | DAILY | CONT |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| BOD | SAMPLE MEASUREMENT | 17.7 | 35.3 | Kg/day | [illegible] | [illegible] | [illegible] | mg/l | 2 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | — | | | | | | |
| TSS | SAMPLE MEASUREMENT | 17.4 | 47.2 | Kg/day | 3 | [illegible] | [illegible] | mg/l | — | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | — | | | | | | |
| Cr6+ | SAMPLE MEASUREMENT | <0.01 | <0.01 | Kg/day | <0.01 | [illegible] | [illegible] | mg/l | 2 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | — | | | | | | |
| Cr tot-R | SAMPLE MEASUREMENT | 0.01 | 0.02 | Kg/day | <0.01 | [illegible] | 0.02 | mg/l | 2 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | — | | | | | | |
| $F^-$ | SAMPLE MEASUREMENT | 6.2 | 8.6 | Kg/day | 5 | [illegible] | 12 | mg/l | 2 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | | | | — | | | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 2.1 | — | 12.2 | pH | 8 | DAILY | CONT |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | | AREA CODE | NUMBER | YEAR | MO | DAY |
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)



SCOEPA00035083

SCOEPA0003508 4

## GENERAL INSTRUCTIONS

1. If form has been partially completed by preprinting, disregard instructions directed at entry of that information already preprinted.
2. Enter "PERMITTEE NAME/MAILING ADDRESS (and facility name/location, if different)," "PERMIT NUMBER," and "DISCHARGE NUMBER" where indicated. (A separate form is required for each discharge.)
3. Enter dates beginning and ending "MONITORING PERIOD" covered by form where indicated.
4. Enter each "PARAMETER" as specified in monitoring requirements of permit.
5. Enter "SAMPLE MEASUREMENT" data for each parameter under "QUANTITY" and "QUALITY" in units specified in permit. "AVERAGE" is normally arithmetic average (geometric average for bacterial parameters) of all sample measurements for each parameter obtained during "MONITORING PERIOD." "MAXIMUM" and "MINIMUM" are normally extreme high and low measurements obtained during "MONITORING PERIOD." (NOTE to municipals with secondary treatment requirement, enter 30-day average of sample measurements under "AVERAGE" and enter maximum 7-day average of sample measurements obtained during monitoring period under "MAXIMUM".
6. Enter "PERMIT REQUIREMENT" for each parameter under "QUANTITY" and "QUALITY" as specified in permit.
7. Under "NO. EX" enter number of sample measurements during monitoring period that exceed maximum (and/or minimum or 7-day average as appropriate) permit requirement for each parameter. If none, enter "0".
8. Enter "FREQUENCY OF ANALYSIS" both as "SAMPLE MEASUREMENT" (actual frequency of sampling and analysis used during monitoring period) and as "PERMIT REQUIREMENT" specified in permit. (e.g., Enter "CONT." for continuous monitoring, "1/7" for one day per week, "1/30" for one day per month, "1/90" for one day per quarter, etc.)
9. Enter "SAMPLE TYPE" both as "SAMPLE MEASUREMENT" (actual sample type used during monitoring period) and as "PERMIT REQUIREMENT." (e.g., Enter "GRAB" for individual sample, "24HC" for 24-hour composite, "N/A" for continuous monitoring, etc.)

FOLD HERE FIRST

10. WHERE VIOLATIONS OF PERMIT REQUIREMENTS ARE REPORTED, ATTACH A BRIEF EXPLANATION TO DESCRIBE CAUSE AND CORRECTIVE ACTIONS TAKEN, REFERENCE EACH VIOLATION BY DATE.
11. If "no discharge" occurs during monitoring period, enter "NO DISCHARGE" across form in place of data entry.
12. Enter "NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER" with "SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT," "TELEPHONE NUMBER" and "DATE" at bottom of form.
13. Mail signed Report to Office(s) by date(s) specified in permit. Retain copy for your records.
14. More detailed instructions for use of this DISCHARGE MONITORING REPORT (DMR) form may be obtained from Office(s) specified in permit.

## LEGAL NOTICE

This report is required by law (33 U.S.C. 1318; 40 C.F.R. 125.27). Failure to report or failure to report truthfully can result in civil penalties not to exceed $10,000 per day of violation; or in criminal penalties not to exceed $25,000 per day of violation, or by imprisonment for not more than one year, or by both.

FOLD HERE SECOND

D.E.Q. - WATER QUALITY DIV.
P.O. BOX 1760
PORTLAND, ORE. 97207

PLACE STAMP HERE

WATER POLLUTION
P.O. BOX 3180
PORTLAND, ORE. 97208

FOLD HERE THIRD

STAPLE HERE

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME [illegible]

ADDRESS [illegible]

FACILITY [illegible]

LOCATION [illegible]

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)

# DISCHARGE MONITORING REPORT (*DMR*)

*Form Approved*
*OMB No. 158 - R0073*

2834-J
File No. 93450

| (2-1[illegible]) | (17-19) |
|---|---|
| [illegible] | [illegible] |
| PERMIT NUMBER | DISCHARGE NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| FROM | 90 | 0 | 1 | TO | 90 | 8 | 31 |
| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |

**NOTE: Read Instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling water & Boiler Blowdown Total $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | 0.04 | 1.9 | 5.0 | mg/l | 0 | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | [illegible] | [illegible] | | 0 | | [illegible] |
| FLOW | SAMPLE MEASUREMENT | 246 | 418 | m³/day | — | — | — | — | — | est. | record |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 6.9 | — | 9.0 | pH units | | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | [illegible] |
| TEMP | SAMPLE MEASUREMENT | — | — | — | 15 | — | 20 | °C | | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | | | [illegible] |
| Free Anal Chlorine | SAMPLE MEASUREMENT | — | — | — | 0 | 0 | 0 | mg/l | 0 | [illegible] | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | [illegible] | [illegible] | | 0 | | [illegible] |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE AREA CODE | TELEPHONE NUMBER | DATE YEAR | DATE MO | DATE DAY |
|---|---|---|---|---|---|---|---|
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)

The reported flow figure above is an estimate based on observed flow rates. The totalizer is as yet still not functional.

Ave 45 GPM OUT => 246 m³/day
MAX 100 GPM [illegible] => 418 m³/day



SCOEPA00035085

SCOEPA0003086

## GENERAL INSTRUCTIONS

1. If form has been partially completed by preprinting, disregard instructions directed at entry of that information already preprinted.
2. Enter "PERMITTEE NAME/MAILING ADDRESS (and facility name/location, if different)," "PERMIT NUMBER," and "DISCHARGE NUMBER" where indicated. (A separate form is required for each discharge.)
3. Enter dates beginning and ending "MONITORING PERIOD" covered by form where indicated.
4. Enter each "PARAMETER" as specified in monitoring requirements of permit.
5. Enter "SAMPLE MEASUREMENT" data for each parameter under "QUANTITY" and "QUALITY" in units specified in permit. "AVERAGE" is normally arithmetic average (geometric average for bacterial parameters) of all sample measurements for each parameter obtained during "MONITORING PERIOD." "MAXIMUM" and "MINIMUM" are normally extreme high and low measurements obtained during "MONITORING PERIOD." (NOTE to municipals with secondary treatment requirement, enter 30-day average of sample measurements under "AVERAGE" and enter maximum 7-day average of sample measurements obtained during monitoring period under "MAXIMUM".)
6. Enter "PERMIT REQUIREMENT" for each parameter under "QUANTITY" and "QUALITY" as specified in permit.
7. Under "NO. EX" enter number of sample measurements during monitoring period that exceed maximum (and/or minimum or 7-day average as appropriate) permit requirement for each parameter. If none, enter "0".
8. Enter "FREQUENCY OF ANALYSIS" both as "SAMPLE MEASUREMENT" (actual frequency of sampling and analysis used during monitoring period), and as "PERMIT REQUIREMENT" specified in permit. (e.g., Enter "CONT." for continuous monitoring, "1/7" for one day per week, "1/30" for one day per month, "1/90" for one day per quarter, etc.)
9. Enter "SAMPLE TYPE" both as "SAMPLE MEASUREMENT" (actual sample type used during monitoring period) and as "PERMIT REQUIREMENT." (e.g., Enter "GRAB" for individual sample, "24HC" for 24-hour composite, "N/A" for continuous monitoring, etc.)

FOLD HERE FIRST

10. WHERE VIOLATIONS OF PERMIT REQUIREMENTS ARE REPORTED, ATTACH A BRIEF EXPLANATION TO DESCRIBE CAUSE AND CORRECTIVE ACTIONS TAKEN. REFERENCE EACH VIOLATION BY DATE.
11. If "no discharge" occurs during monitoring period, enter "NO DISCHARGE" across form in place of data entry.
12. Enter "NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER" with "SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT," "TELEPHONE NUMBER" and "DATE" at bottom of form.
13. Mail signed Report to Office(s) by date(s) specified in permit. Retain copy for your records.
14. More detailed instructions for use of this DISCHARGE MONITORING REPORT (DMR) form may be obtained from Office(s) specified in permit.

## LEGAL NOTICE

This report is required by law (33 U.S.C. 1318; 40 C.F.R. 125.27). Failure to report or failure to report truthfully can result in civil penalties not to exceed $10,000 per day of violation; or in criminal penalties not to exceed $25,000 per day of violation, or by imprisonment for not more than one year, or by both.

FOLD HERE SECOND

Department of Environmental Quality
Water Quality Div.
P.O. Box 1760
Portland, OR. 97207

PLACE STAMP HERE

Wasco Shipping
PO Box 03180
Portland, OR. 97203

FOLD HERE THIRD

STAPLE HERE

| | NOWW | Process Waste | MV #2 | MV #3 |
|---|---|---|---|---|
| 7/31 | 322227 | 906617 | 4431.2 | 000 |
| 8/1 | 3309340 | 9284430 | 44427 | – |
| 2 | – | – | – | – |
| 3 | – | – | – | – |
| 4 | 3400180 | 9597810 | 4452.8 | 000 |
| 5 | 3471550 | 980541 | 4461.9 | – |
| 6 | 354080 | 000566 | 4466.0 | – |
| 7 | 3610300 | 1029390 | – | – |
| 8 | 3664410 | 1043120 | – | – |
| 9 | 3722320 | 0597590 | 4501.7 | – |
| 10 | – | – | – | – |
| 11 | 3760400 | 1074467o | 4555.7 | – |
| 12 | 382553 | 1093997 | 04599.0 | 007501 |
| 13 | 389192 | 1113515 | 4644.4 | – |
| 14 | 396918 | 11339830 | 4691.1 | – |
| 15 | 404380 | 1550890 | 4705.6 | – |
| 16 | – | – | – | – |
| 17 | 412420 | 178988 | 4720.2 | – |
| 18 | | | | – |
| 19 | 419666 | 196454 | 4729.7 | – |
| 20 | 428575 | 216836 | 4742.8 | – |
| 21 | 436990 | 234354 | 4751.8 | – |
| 22 | 444912 | 252121 | 4761.5 | – |
| 23 | – | – | – | – |
| 24 | – | – | – | – |
| 25 | 457791 | 276637 | 4771.8 | – |
| 26 | 463226 | 293618 | 4777.7 | – |
| 27 | 473824 | 312369 | 47906 | – |
| 28 | 480787 | 327595 | 4791.6 | – |
| 29 | 490214 | 347977 | 4807.3 | – |
| 30 | 499017 | 370911 | 4887.8 | – |
| 31 | 5059700 | 13977780 | 4819.1 | – |
| 9/1 | 510995 | 1402975 | 4819.1 | – |
| 2 | 516260 | 1419390 | 4824 | 15473 |

SCOEPA00035087

| | MV #3 | Comb. Eff. | NOWW | River |
|---|---|---|---|---|
| 7/31 | 20°/6.9 | 20/7.5 | 22/7.6 | |
| 8/5 | — | 1°/8.2 | 22°/8.0 | |
| 8/7 | 23/7.9 | 17/9.0 | 22/8.2 | |
| 8/15 | 19/6.0 ~~5/8.5~~ | 5/8.5 | | 2°/6.2 |
| 8/20 | /6.6 | 17/7.0 | | 15/8.0 |
| 8/87 | 12°/6.8 | 6°/6.9 | 6°/6.8 | |
| 9/3 | 32/6.9 | 4/6.9 | 4/7.0 | |

SCOEPA00035088

| | Process W.W. totalizer ×10 Gal | ΔGal×10 | $m^3$ | BOD | TSS | $F^-$ | $Cr^{6+}$ | $Cr^{total}$ | $PO_4^{\equiv}$ |
|---|---|---|---|---|---|---|---|---|---|
| 7/31 | 906617 | 21826 | ~~826.2~~ | 68 | | | .001 | .0023 | |
| 8/1 | 928443 | 31338 | 1186.3 | | | | | | |
| 2 | — | — | — | | | | | | |
| 3 | — | — | — | | | | | | |
| 4 | 959781 | 20760 | 785.8 | | | | | | |
| 5 | 980541 | 20025 | 758.0 | gary 39 ppm 29.6 kg | 17 12.9 | 7 5.3 | <0.001 ∅ | 0.004 ∅ | |
| 6 | 000566 | 28824 | 1091.1 | | | | | | |
| 7 | 029390 | 13730 | 519.7 | gary 68 35.3 | 90.9 47.2 | 12.3 6.4 | 0.003 ∅ | 0.02 0.01 | 0.04 |
| 8 | 043120 | 16639 | 629.9 | | | | | | |
| 9 | 059759 | 14708 | 556.8 | | | | | | |
| 10 | — | — | — | | | | | | |
| 11 | 074467 | 19530 | 739.3 | | | | | | |
| 12 | 093997 | 19518 | 738.8 | gary 5 3.7 | 3 2.2 | 5 3.7 | .002 ∅ | .005 ∅ | sample missed |
| 13 | 113515 | 20468 | 774.8 | | | | | | |
| 14 | 133983 | 21106 | 799.0 | | | | | | |
| 15 | 155089 | 23899 | 904.7 | Dutch 5 3.9 ~~4.5~~ | 6 4.7 ~~5.4~~ | 11 ~~9.9~~ 8.6 | .002 ∅ | .006 ∅ | |
| 16 | — | — | — | | | | | | |
| 17 | — | — | — | 777.9 + 2(63.4) | | | | | |
| 18 | 178988 | 17466 | 661.2 | | | | | | |
| 19 | 196454 | 20382 | 771.5 | | | | | | |
| 20 | 216836 | 17518 | 663.1 | Billy 48 31.8 | 48 31.8 | 9 6.0 | .004 ∅ | .02 0.01 | 5 |
| 21 | 234354 | 17767 | 672.6 | | | | | | |
| 22 | 252121 | 24516 | 928.0 | | | | | | |
| 23 | — | — | — | | | | | | |
| 24 | — | — | — | | | | | | |
| 25 | 276637 | 16981 | 642.8 | | | | | | |
| 26 | 293618 | 33977 | 1286.2 | | | | | | |
| 27 | 312369 | 15226 | 576.4 | Billy 55 31.7 | 10 5.8 | 12 6.9 | .005 ∅ | .02 0.01 | 0.5 |
| 28 | 327595 | 20382 | 771.5 | | | | | | |
| 29 | 347977 | 22934 | 868.1 | | | | | | |
| 30 | 370911 | 26867 | 1017.0 | | | | | | |
| 31 | 397778 | 5197 | 196.7 | | | | | | |
| 9/1 | 402975 | 16415 | ~~621.4~~ | | | | | | |
| 2 | 419390 | | | | | | | | |
| | | | ~~19986.9~~ 18539.3 598.0 | 36.6 ~~22.8~~ 17.7 | 29.2 ~~17.6~~ 17.4 | 9.4 ~~6.4~~ 6.2 | ∅ ∅ | 0.01 ~~0.02~~ 0.02 | 1.85 |

SCOEPA00035089

pit
record

| days out | high | [illegible] |
|---|---|---|
| | — | 2.1 |
| 1 | | |
| 1 | 9.8 | 2.7 |
| 1 | — | 5.2 |
| 1 | 11.5 | |
| 1 | 10.6 | 3.1 |
| 1 | — | 3.9 |
| 1 | 12.2 | — |
| 1 | 11.3 | — |

REVERSE OSMOSIS
DEIONIZED WATER

**WACKER**

Miriam Dehnbostel Operator
8-31-80 Date

| | LOCATION | SUSPENDED SOLIDS µg/ml | OXIDIZABLE CARBON µg/ml | BACTERIA colonies/ml | RESISTIVITY meg-ohms |
|---|---|---|---|---|---|
| 1 | #80 Final Polishing sink before bed | 0.5 | 0.569 | | 16.67 |
| 2 | Total residue 11.3 | ug/ml | | | |
| 3 | dissolved solids ϕ | | | | |
| 4 | #9 Final cleaning | 0/i | 0.455 | | 22.22 |
| 5 | Total residue 12.4 | ug/ml | | | |
| 6 | dissolved solids ϕ | | | | |
| 7 | | | | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
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| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |

Dark Burning

SCOEPA00035091

RECEIVED
AUG 04 1980
WACKER SILTRONIC
ENGINEERING

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME WACKER SILTRONIC CORP.
ADDRESS 200 N.W. FRONT AVE.
PORTLAND, ORE. 97229
MAILING AD. - P.O. BOX 03180, 97203
FACILITY SAME AS ABOVE
LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)
DISCHARGE MONITORING REPORT (*DMR*)

Form Approved
OMB No. 158 -

| (2-16) | (17-19) |
|---|---|
| OR 0 3058-9 | 004 |
| PERMIT NUMBER | DISCHARGE NUMBER |

2834-J

File # 93450

| MONITORING PERIOD | | | | | | |
|---|---|---|---|---|---|---|
| FROM | 80 | 7 | 1 | TO | 80 | 7 | 31 |
| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SA T (6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling Water & Boiler BD. Total $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | <0.01 | 0.02 | 0.05 | mg/l | 0 | weekly | g |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | 0 | weekly | g |
| Flow | SAMPLE MEASUREMENT | 246 | 418 | $m^3$/day | — | — | — | — | 0 | see below est. | tot re |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | 0 | daily | re |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | ~~6.0~~ | — | ~~9.0~~ | pH | | | |
| Combined Outfall pH | SAMPLE MEASUREMENT | — | — | — | 6.1 | — | 8.3 | pH | 0 | weekly | g |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | weekly | g |
| Temp. | SAMPLE MEASUREMENT | — | — | — | 13 | 17 | 21 | °C | | weekly | g |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | | weekly | g |
| Free Avail Chlorine | SAMPLE MEASUREMENT | — | — | — | 0 | 0 | 0 | mg/l | 0 | during chlorination | g |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | 0 | during chlorination | g |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | | TELEPHONE | | DATE | |
|---|---|---|---|---|---|---|
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)

Total Flow - The reported flow figures are estimates based on observed flow rates through the meter vault. The totalizing integrator has been found to be defective & to have failed to integ. The above figures were calculated as follows: Ave 45 g.p.m. continuous => 246 $m^3$/day
Max 100 g.p.m. for 16 hrs and 30 g.p.m. for 8 hrs => 418 $m^3$/day.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)



SCOEPA00035093

redi-letter

31800 TRIP

TO Jim —

John P

FROM Dick Dunning

RECEIVED
AUG 18 1980
WACKER SILTRONIC ENGINEERING

SUBJECT Monthly NPDES Report.

DATE 8/12/80

**MESSAGE**

Totalizer on Meter Vault #3 still not operational

Estimated Flowrates: Ave: 45 G.P.M. → 246 $m^3$/day
for month of July. Max: 100 G.P.M.

Est. Max Day possible: 100 G.P.M. × 16 hrs + 30 G.P.M. × 8 hrs = 418 $m^3$/day

Note — these numbers are not filled in on report sheet.

SIGNED Dick Dunning

8/18

**REPLY**

John —

For your review and approval.

Jim Ellis

SIGNED

DATE / /

8/27/80 10:15 A.M.
Given by J. P. Hamon to put above #'s on report & explanation in comments section. Returned to him for signature. Also, he advised me to ensure that meter vault #3 had been made operational.

DED

REDIFORM 4S 471

SEND PARTS 1 AND 3 WITH CARBON INTACT - PART 3 WILL BE RETURNED WITH REPLY.

POLY PAK (50 SETS) 4P 471

SCOEPA00035094

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME INTEL SILTRONIC CORP.

ADDRESS 7200 N.W. FRONT AVE. 97229
PORTLAND, ORE. 97229
MAILING ADDRESS - P.O. Box 03180, 97203

FACILITY SAME AS ABOVE

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)
DISCHARGE MONITORING REPORT (*DMR*)

*Form Approved*
*OMB No. 158 - R0073*

(2-16) PERMIT NUMBER: OR0003058 7

(17-19) DISCHARGE NUMBER: 004

2834-J
File # 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 7 | 1 | TO | 80 | 7 | 31 |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FLOW | SAMPLE MEASUREMENT | 527.9 | 823.6 | $m^3$/day | — | — | — | — | — | daily | cont. record |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | daily | total record |
| BOD | SAMPLE MEASUREMENT | 47.9 | 63.3 | kg/day | 46.5 | 66.7 | 94.5 | mg/l | 6 | weekly | 24hr COMP. |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | weekly | 24 hr COMP. |
| TSS | SAMPLE MEASUREMENT | 4.7 | 6.7 | kg/day | 2.6 | 6.6 | 10 | mg/l | 0 | weekly | 24hr COMP. |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | 0 | weekly | 24 hr COMP. |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0 | 0 | kg/day | <0.01 | <0.01 | <0.01 | mg/l | 0 | weekly | 24hr COMP |
| | PERMIT REQUIREMENT | 0.01 | 0.05 | | — | 0.02 | 0.05 | | 0 | weekly | 24hr COMP |
| $Cr^{TOTAL}$ | SAMPLE MEASUREMENT | 0 | 0 | kg/day | <0.01 | <0.01 | <0.01 | mg/l | 0 | weekly | 24hr COMP. |
| | PERMIT REQUIREMENT | 0.2 | 0.5 | | — | 0.3 | 1.0 | | 0 | weekly | 24hr COMP. |
| $F^-$ | SAMPLE MEASUREMENT | 6.0 | 7.9 | kg/day | 5.6 | 8.3 | 9.8 | mg/l | 0 | weekly | 24hr COMP. |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6 | 20 | | 0 | weekly | 24hr COMP. |
| pH | SAMPLE MEASUREMENT | — | — | | 5.6 | — | 11.6 | | 10 | daily | continuous |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 30 | daily | continuous |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | | TELEPHONE | DATE |
|---|---|---|---|---|
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE / NUMBER | YEAR / MO / DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)



SCOEPA00035095

PERMITTEE, NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME WACKER SILTRONIC CORP.
ADDRESS 7200 N.W. FRONT AVE.
PORTLAND, ORE. 97229
MAILING AD. - P.O. BOX 0380, 97203
FACILITY SAME AS ABOVE
LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)
DISCHARGE MONITORING REPORT (*DMR*)

Form Approved
OMB No. 158 - R0073

(2-16) PERMIT NUMBER: OR 00305 -9
(17-19) DISCHARGE NUMBER: 004

2834-J
File #93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 7 | 1 | TO | 80 | 7 | 31 |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling Water & Boiler BD. Total $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | <0.01 | 0.02 | 0.05 | mg/l | 0 | weekly | grab |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | 0 | weekly | grab |
| Flow | SAMPLE MEASUREMENT | See quick letter to J. Ellis 8/12/80 | | $m^3$/day | — | — | — | — | 0 | | totalizer recorder |
| | PERMIT REQUIREMENT | | | | — | — | — | | 0 | daily | recorder |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | ~~6.0~~ | — | ~~9.0~~ | pH | | | |
| Combined Outfall pH | SAMPLE MEASUREMENT | — | — | — | 6.1 | — | 8.3 | pH | 0 | weekly | grab |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | weekly | grab |
| Temp. | SAMPLE MEASUREMENT | — | — | — | 13 | 17 | 21 | °C | | weekly | grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | | weekly | grab |
| Free Avail Chlorine | SAMPLE MEASUREMENT | — | — | — | 0 | 0 | 0 | mg/l | 0 | during chlorination | grab |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | 0 | during chlorination | grab |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DAY |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)



SCOEPA00035096

July 1980

| | 8:00 AM reading | gpd | 8:00 A.M. → 8:00 A.M. $m^3$/day |
|---|---|---|---|
| 1 | 4,955,360 | 187220 | 708.7 |
| 2 | 5,142,580 | 176880 | 669.6 |
| 3 | 5,319,460 | 131090 | 496.2 |
| 4 | — | — | — |
| 5 | 5,450,550 | 77870 | 294.8 |
| 6 | — | — | — |
| 7 | 5,528,420 | 200 000 | 757.1 |
| 8 | 5,725,630 | 130 160 | 492.7 |
| 9 | 5,858,580 | 216 710 | 820.3 |
| 10 | 6,075,290 | 177 060 | 670.2 |
| 11 | 6,252,350 | 151030 | 571.7 |
| 12 | — | — | — |
| 13 | — | — | — |
| 14 | 6,403,380 | 233420 | 883.6 |
| 15 | 6,636,800 | 176270 | 667.3 |
| 16 | 6,813,070 | 204980 | 775.9 |
| 17 | 7,018,050 | 189360 | 716.8 |
| 18 | 7,207,410 | 226520 | 857.5 |
| 19 | — | — | — |
| 20 | — | — | — |
| 21 | 7,433,930 | 217560 | 823.6 |
| 22 | 7,651,490 | 214220 | 810.9 |
| 23 | 7,865,710 | 212440 | 804.2 |
| 24 | 8,078,150 | 214090 | 810.4 |
| 25 | 8,292,240 | 155620 | 589.1 |
| 26 | 8,447,860 | 75580 | 286.1 |
| 27 | — | — | — |
| 28 | 8,523,440 | 185270 | 701.3 |
| 29 | 8,708,710 | 177540 | 672.1 |
| 30 | 8,886,250 | 179920 | 681.1 |
| 31 | 9,066,170 | 218260 | 826.2 |
| AUG 1 | 9,284430 | 31 \| 4329070 | 16,387.3 |
| | | 139 647 gpd | 527.9 |

ie. deep 5.6 - 11.6

SCOEPA00035097

# Process Wastewater.

July 1980

| Date | Flow | BOD PPM | BOD Kg | TSS PPM | TSS Kg | $F^-$ PPM | $F^-$ Kg | $Cr^T$ PPM | $Cr^T$ Kg | $Cr^{6+}$ PPM | $Cr^{6+}$ Kg | $PO_4^{\equiv}$ PPM | $PO_4^{\equiv}$ Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 708.7 | [illegible] | | | | | | | | | | | |
| 2 | 669.6 | 97/92 | 63.3 | 8.2/20 | 5.5 | 9.7/9.9 | 6.6 | 0.01/<0.01 | ∅ | <0.01/<0.01 | ∅ | <0.01 | ∅ |
| 3 | 496.2 | | | | | | | <0.01 | | <0.01 | | <0.01 | |
| 4 | — | 94.5 max | | 8.2 ? contaminated etc... ? | | 9.8 max | | | | | | | |
| 5 | 294.8 | | | | | | | | | | | | |
| 6 | — | | | | | | | | | | | | |
| 7 | 757.1 | | | | | | | | | | | | |
| 8 | 492.7 | | | | | | | | | | | | |
| 9 | 820.3 | | | | | | | | | | | | |
| 10 | 670.2 | 53/44 | 32.5 min | 2.5/2.7 | 1.7 min | 8.4/9.6 | 6.0 | </<0.01 | ∅ | </<0.01 | ∅ | <0.01 min | ∅ |
| 11 | 571.7 | 48.5 | | 2.6 min | | 9.0 ← value used | | | | | | | |
| 12 | — | | | | | | | | | | | | |
| 13 | — | | | | | | | | | | | | |
| 14 | 883.6 | | | | | | | | | | | | |
| 15 | 667.3 | 85 | 56.7 | 10 max | 6.7 max | 9.8 | 6.5 | <0.01 | ∅ | <0.01 | ∅ | 0.05 max | |
| 16 | 775.9 | | | | | | | | | | | | |
| 17 | 716.8 | 58 | 41.6 | 8.5 | 6.1 | 6.1 | 4.4 min | <0.01 | ∅ | <0.01 | ∅ | — | |
| 18 | 857.5 | | | | | | | | | | | | |
| 19 | — | | | | | | | | | | | | |
| 20 | — | | | | | | | | | | | | |
| 21 | 823.6 max | | | | | | | | | | | | |
| 22 | 810.9 | | | | | | | | | | | | |
| 23 | 804.2 | 46.5 min | 37.4 | 3 | 2.4 | 5.6 min | 4.5 | ~~0.01~~ | ∅ | <0.01 | ∅ | 0.03 | |
| 24 | 810.4 | | | | | | | | | | | | |
| 25 | 589.1 | | | | | | | | | | | | |
| 26 | 286.1 min | | | | | | | | | | | | |
| 27 | — | | | | | | | | | | | | |
| 28 | 701.3 | | | | | | | | | | | | |
| 29 | 672.1 | | | | | | | | | | | | |
| 30 | 681.1 | | | | | | | | | | | | |
| 31 | 826.2 | 68 | 56.2 | 7.2 | 5.9 | 9.6 | 7.9 max | <0.01 | ∅ | <0.01 | ∅ | 0.03 | |
| Total | 16387.3 | 400.5 | 287.7 | 39.5 | ~~28.2~~ | 49.9 | 35.9 | ∅ | ∅ | ∅ max min | ∅ max min | 0.11 | |
| Ave | 527.9 avg | 66.7 | 47.9 | 6.6 | 4.7 | 8.3 | 6.0 | ∅ max min | ∅ max min | ∅ max min | ∅ max min | 0.022 | |

SCOEPA00035098

| | Raw | Neut. | | Raw | Neut. | Net Ut #2 |
|---|---|---|---|---|---|---|
| 1 | 1466200 | 4955360 | 16 | 2297310 | 681307 | 428422 |
| 2 | 1547840 | 5142580 | 17 | 237344 | 701805 | 43041 |
| 3 | 1633300 | 5319460 | 18 | 246118 | 720741 | 43175 |
| 4 | — | — | 19 | — | — | — |
| 5 | 1689910 | 5450550 | 20 | — | — | — |
| 6 | — | — | 21 | 2554340 | 743393 | 4334.5 |
| 7 | 1719940 | 5528420 | 22 | 267149 | 7651480 | — |
| 8 | 1808020 | 5725630 | 23 | 2718390 | 7865710 | 4371.2 |
| 9 | 1864280 | 5858580 | 24 | 2803340 | 8078150 | 4383.6 / 620.7 |
| 10 | 1977540 | 6075290 | 25 | 2887190 | 8292240 | 4392.6 / 620.7 |
| 11 | 2080620 | 6252350 | 26 | 294857 | 844786 | — |
| 12 | — | — | 27 | — | — | — |
| 13 | — | — | 28 | 2968030 | 852344 | 4402.0 |
| 14 | 2136870 | 6403380 | 29 | 3046310 | 8708710 | 4411.6 |
| 15 | 2211170 | 663680 | 30 | 3117790 | 8886250 | 4424 |
| | | | 31 | 322227 | 906617 | 4431.2 |

Jackson Turbibity Units.

Sludge Probe.

SCOEPA00035099

WASTE WATER ANALYSIS FOR DEPARTMENT OF ENVIRONMENTAL QUALITY

Copies to:

Dirk Dunning
J.A. Moreland
Jim Ellis
Fred Voegerl

DATE 7/17/80

OPERATOR Elinor Levin

| TEST RESULTS | PERMISSABLE | COMBINED EFFLUENT Sample 1 (14⁰⁰ on 7/17/80) | ~~COMBINED EFFLUENT Sample 2~~ | ~~METER VAULT Sample 3~~ | ORGANIC WASTE WATER Sample 4 (14⁰⁰ 7/17/80) |
|---|---|---|---|---|---|
| Total Suspended Solids | 15mg/liter | 8.5 mg/L | | | 23.6 mg/L |
| Fluoride | 6mg/liter | * mg/l | | | — |
| Chromium VI | 0.02mg/liter | < 0.001 | | | — |
| Chromium Total | 0.3mg/liter | 0.002 | | | — |
| Chlorine (Residue) | 0.2mg/liter | — | | | — |
| BOD | 15mg/liter | 58 mg/L | | | 120 mg/L |
| Total Phosphates | 2.0mg/liter | — | | | — |

*Results will be out as soon as standard arrives

SCOEPA00035100

7/21/80
about 2:15 PM
Irby

Acid Storage Tanks
Wastewater

Chromium 2.53 ppm

Inspector Elmer Irby
7/21/80

SCOEPA00035101

WASTE WATER ANALYSIS FOR DEPARTMENT OF ENVIRONMENTAL QUALITY

Copies to:

Dirk Dunning
J.A. Moreland
Jim Ellis
Fred Voegerl

DATE 7/21/80

OPERATOR Elinor Levin

Taken 14:30 7/21/80 Greg.

| TEST RESULTS | PERMISSABLE | COMBINED EFFLUENT Sample 1 | COMBINED EFFLUENT Sample 2 | METER VAULT Sample 3 | neutralized ORGANIC WASTE WATER Sample 4 |
|---|---|---|---|---|---|
| Total Suspended Solids | 15mg/liter | | | | 16.4 mg/L |
| Fluoride | 6mg/liter | | | | – |
| Chromium VI | 0.02mg/liter | | | | – |
| Chromium Total | 0.3mg/liter | | | | – |
| Chlorine (Residue) | 0.2mg/liter | | | | – |
| BOD | 15mg/liter | | | | Samples out of Incubator 7/29/80 |
| Total Phosphates | 2.0mg/liter | | | | – |

WASTE WATER ANALYSIS FOR DEPARTMENT OF ENVIRONMENTAL QUALITY

Copies to:

Dirk Dunning
J.A. Moreland
Jim Ellis
Fred Voegerl

DATE 7/22/80

OPERATOR Elinor Lewis

Taken 7/15/80 Taken 7/15/80 Taken 7/15/80

| TEST RESULTS | PERMISSABLE | COMBINED EFFLUENT Sample 1 | COMBINED ~~EFFLUENT~~ ~~Sample 2~~ Clinfair effluent | METER VAULT Sample 3 | ORGANIC WASTE WATER Sample 4 |
|---|---|---|---|---|---|
| Total Suspended Solids | 15mg/liter | | | | |
| Fluoride | 6mg/liter | | | | |
| Chromium VI | 0.02mg/liter | | | | |
| Chromium Total | 0.3mg/liter | | | | |
| Chlorine (Residue) | 0.2mg/liter | | | | |
| BOD | 15mg/liter | 85 mg/L | 122 mg/L | | 92 mg/L |
| Total Phosphates | 2.0mg/liter | | | | |

SCOEPA00035103

WASTE WATER ANALYSIS FOR DEPARTMENT OF ENVIRONMENTAL QUALITY

Copies to:

Dirk Dunning
J.A. Moreland
Jim Ellis
Fred Voegerl

DATE 7/24/80

OPERATOR E. Levin

| TEST RESULTS | PERMISSABLE | COMBINED EFFLUENT Sample 1 (1400) | ~~COMBINED EFFLUENT~~ Sample 2 (clarifier effluent 1400) | METER VAULT Sample 3 (1400) | ORGANIC WASTE WATER Sample 4 (1405 collected 7/23/80 By [illegible]) |
|---|---|---|---|---|---|
| Total Suspended Solids | 15mg/liter | 3 mgs/L | — | — | 13 mgs/L |
| Fluoride | 6mg/liter | 5.6 mgs/L | — | — | — |
| Chromium VI | 0.02mg/liter | <0.001 mg/L | — | — | — |
| Chromium Total | 0.3mg/liter | <0.001 mgs/L | — | — | — |
| Chlorine (Residue) | 0.2mg/liter | — | — | — | — |
| BOD | 15mg/liter | samples incubated for 5 days - out 7/29/80 | | — | Samples incubated until 7/29/80 |
| Total Phosphates | 2.0mg/liter | — | — | 0.03 mgs/L | — |
| COD | | | we do not have 4 chemicals needed to do COD's | | |

WASTE WATER ANALYSIS FOR DEPARTMENT OF ENVIRONMENTAL QUALITY

Copies to:
Dirk Dunning
J.A. Moreland
Jim Ellis
Fred Voegerl

DATE 7/24/80

OPERATOR Elaine a Lewis

Collected 7/17/80 1400 By Voegerl

| TEST RESULTS | PERMISSABLE | COMBINED EFFLUENT Sample 1 | COMBINED EFFLUENT Sample 2 | METER VAULT Sample 3 | ORGANIC WASTE WATER Sample 4 |
|---|---|---|---|---|---|
| Total Suspended Solids | 15mg/liter | — | | | |
| * Fluoride | 6mg/liter | 6.1 mg/L | | | |
| Chromium VI | 0.02mg/liter | — | | | |
| Chromium Total | 0.3mg/liter | — | | | |
| Chlorine (Residue) | 0.2mg/liter | — | | | |
| BOD | 15mg/liter | — | | | |
| Total Phosphates | 2.0mg/liter | — | | | |

Other results reported previously

SCOEPA00035105

REVERSE OSMOSIS

DEIONIZED WATER Dirk Dunning

WACKER

[illegible] Operator

02-29-80 Date

| | LOCATION | SUSPENDED SOLIDS | OXIDIZABLE CARBON | BACTERIA | RESISTIVITY meg-ohms |
|---|---|---|---|---|---|
| | | µg/ml | µg/ml | colonies/ml | |
| 1 | #8B Final Polishing sink before last | 1.25 | 0.65 | | 16.66 |
| 2 | Dissolved solids: Ø | | | | |
| 3 | Total Residue: 4.0 ug/ml | | | | |
| 4 | | | | | |
| 5 | #10B Rod. after filter | 0.95 | 0.39 | | 18.18 |
| 6 | Dissolved solids Ø | | | | |
| 7 | Total Residue: 0.3 ug/ml | | | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | Bacteria will be reported on Thurs. | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |

SCOEPA00035106

Dirk Dunning

RECEIVED
JUL 30 1980
WACKER SILTRONIC
ENGINEERING

Dirk

Tests for Reverse Osmosis Rod 1 : 7-28-80
Requested by Dirk Dunning mg

oxidizable carbon: 100 ml $H_2O$

0.953 ug/ml

Suspended solids: 200 ml $H_2O$

-0.8 ug/ml

Total residue: 100 ml $H_2O$

4.3 ug/ml

Dissolved solids:

2.75 ug

REVERSE OSMOSIS
DEIONIZED WATER

**WACKER**

Miriam Lelungbox Operator
07-25-80 Date

| | LOCATION | SUSPENDED SOLIDS µg/ml | OXIDIZABLE CARBON µg/ml | BACTERIA colonies/ml | RESISTIVITY meg-ohms |
|---|---|---|---|---|---|
| 1 | #1 Final cleaning, slurry Rm. | 0/1 | 0.460 | 0/1 | 22.22 |
| 2 | #2 Polishing, slurry Rm. | 0/1 | 0.624 | 0/1 | 18.18 |
| 3 | #3 Lab, sink 1 | 0/1 | 0.296 | 1/1 | 18.18 |
| 4 | #3A Lab, sink 2 | 0/1 | 0.296 | 0/1 | 22.22 |
| 5 | #4 Sand blasting | 0/1 | 0.296 | 0/1 | 10.0 |
| 6 | #5 Lapping | 0/1 | 0.690 | 1/1 | 12.5 |
| 7 | #6 Oxidation Room | 0/1 | 0.460 | 0/1 | 22.22 |
| 8 | #7 Analytical Rm, sink 1 | 0/1 | 0.690 | 11/1 | 22.22 |
| 9 | #7A Analytical Rm, sink 2 | 0/1 | 0.624 | 5/1 | 22.22 |
| 10 | #8 Polishing, sink # 2 | 0/1 | 0.788 | 3/1 | 16.67 |
| 11 | #8A Polishing, machine # 2 | 0/1 | 0.460 | 7/1 | 18.18 |
| 12 | #9 Final cleaning | 0/1 | 0.624 | 1/1 | 18.18 |
| 13 | #10 Rod, tank | 0/1 | 0.624 | 4/1 | 2.0 |
| 14 | #10A Rod, before filter | 0/1 | 0.460 | 1/1 | 18.18 |
| 15 | #10B Rod after filter | 0/1 | 0.460 | 14/1 | 22.22 |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |

07-25-80

Dissolved Solids Test with D.S. meter.

| | |
|---|---|
| #1 | ϕ |
| #2 | ϕ |
| #3 | ϕ |
| #3A | ϕ |
| #4 | ϕ |
| #5 | ϕ |
| #6 | ϕ |
| #7 | ϕ |
| #7A | ϕ |
| #8 | ϕ |
| #8A | ϕ |
| #9 | ϕ |
| #10 | 0.5 ug |
| #10A | ϕ |
| #10B | ϕ |

SCOEPA00035110

WASTE WATER ANALYSIS FOR DEPARTMENT OF ENVIRONMENTAL QUALITY

Copies to:

Dirk Dunning
J.A. Moreland
Jim Ellis
Fred Voegerl

DATE 7/29/80

OPERATOR Elton Ferris

Collected 7/23/80 1400 1400 Chamber Effluent 1405 By Inez

| TEST RESULTS | PERMISSABLE | COMBINED EFFLUENT Sample 1 | ~~COMBINED~~ EFFLUENT ~~Sample 2~~ | METER VAULT Sample 3 | ORGANIC WASTE WATER Sample 4 |
|---|---|---|---|---|---|
| Total Suspended Solids | 15mg/liter | | | | |
| Fluoride | 6mg/liter | | | | |
| Chromium VI | 0.02mg/liter | | | | |
| Chromium Total | 0.3mg/liter | | | | |
| Chlorine (Residue) | 0.2mg/liter | | | | |
| BOD | 15mg/liter | 46.5 mg/L | 111 mg/L | — | 85.5 mg/L |
| Total Phosphates | 2.0mg/liter | | | | |

SCOEPA00035111

WASTE WATER ANALYSIS FOR DEPARTMENT OF ENVIRONMENTAL QUALITY

Copies to:

Dirk Dunning
J.A. Moreland
Jim Ellis
Fred Voegerl

DATE 7/29/80

OPERATOR E Lorin

collected 7/21/80
1405 hrs

| TEST RESULTS | PERMISSABLE | COMBINED EFFLUENT Sample 1 | COMBINED EFFLUENT Sample 2 | METER VAULT Sample 3 | ORGANIC WASTE WATER Sample 4 |
|---|---|---|---|---|---|
| Total Suspended Solids | 15mg/liter | | | | |
| Fluoride | 6mg/liter | | | | |
| Chromium VI | 0.02mg/liter | | | | |
| Chromium Total | 0.3mg/liter | | | | |
| Chlorine (Residue) | 0.2mg/liter | | | | |
| BOD | 15mg/liter | | | | 141 mg/L |
| Total Phosphates | 2.0mg/liter | | | | |

SCOEPA00035112

7/28/80
Operator Glenn Lemmon

Organic Wastewater Storage
collected 1140 7/28/80

pH 5.0 (pHydrion paper)

Fluoride 0.1 (PPM) mg/L

SCOEPA00035113

WASTE WATER ANALYSIS FOR DEPARTMENT OF ENVIRONMENTAL QUALITY

Copies to:
Dirk Dunning
J.A. Moreland
Jim Ellis
Fred Voegerl

DATE 7/31/80

OPERATOR Elmer Lewis

m 7/31/80 10 30 — 10 35 — 10 15 — 10 31 By Lucy

| TEST RESULTS | PERMISSABLE | COMBINED EFFLUENT Sample 1 | ~~COMBINED~~ Clarifier EFFLUENT ~~Sample 2~~ | METER VAULT Sample 3 | ORGANIC WASTE WATER Sample 4 |
|---|---|---|---|---|---|
| Total Suspended Solids | 15mg/liter | 7.2 mg/L | — | — | 33.4 mg/L |
| Fluoride | 6mg/liter | 9.6 mg/L | — | — | — |
| Chromium VI | 0.02mg/liter | ont 8/4/80 | — | — | — |
| Chromium Total | 0.3mg/liter | ont 8/4/80 | — | — | — |
| Chlorine (Residue) | 0.2mg/liter | — | — | — | — |
| BOD | 15mg/liter | ont 8/5/80 | ont 8/5/80 | — | ont 8/5/80 |
| Total Phosphates | 2.0mg/liter | — | — | 0.03 mg/L | — |

COD

SCOEPA00035114

WASTE WATER ANALYSIS FOR DEPARTMENT OF ENVIRONMENTAL QUALITY

_ pies to:

Dirk Dunning
J.A. Moreland
Jim Ellis
Fred Voegerl

DATE 7/29/80

OPERATOR Elinor Lorin

collected 7/24/80 By G. Berry

| TEST RESULTS | PERMISSABLE | COMBINED EFFLUENT Sample 1 (10:42) | COMBINED EFFLUENT Sample 2 (10:40) | METER ~~VAULT~~ Sample 3 (10:35 composite effluent) | ORGANIC WASTE WATER Sample 4 (10:45) |
|---|---|---|---|---|---|
| Total Suspended Solids | 15mg/liter | 16 mg/L | 14.2 mg/L | — | 53 mg/L |
| Fluoride | 6mg/liter | 5.3 mg/liter | 5.3 mg/liter | — | — |
| Chromium VI | 0.02mg/liter | < 0.001 mg/L | — | — | — |
| Chromium Total | 0.3mg/liter | 0.002 mg/L | — | — | — |
| Chlorine (Residue) | 0.2mg/liter | — | — | — | — |
| BOD | 15mg/liter | Results on 8/5/80 | — | Reset 8/5/80 | Reset to 8/5/80 |
| Total Phosphates | 2.0mg/liter | — | — | — | — |
| C O D | — | — | — | We do not have 4 chemicals needed to run this test. | — |

SCOEPA00035115

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

July 17, 1980

Dirk Dunning
Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

Laboratory Report No. 800720

Subject: Laboratory analyses of wastewater samples.
Samples collected: July 10, 1980
Samples received: July 10, 1980

| | Concentration, mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 7-10-80 samples Comb. effl. | 2.7 | 9.6 | | < 0.01 | < 0.01 | 44 |
| Clari. effl. | | | 397 | | | 165 |
| Neut. CWW | 13 | | | | | 150 |

Meter Vault #3, total phosphate, as P --- less than 0.01 mg/l

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035116

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

July 11, 1980

Dirk Dunning
Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

Laboratory Report No. 800705

Subject: Laboratory analyses of wastewater samples.
Samples collected: July 2, 1980
Samples received: July 2, 1980

| Sample | TSS | F⁻ | COD | T-Cr | Cr(VI) | BOD-5 |
|---|---|---|---|---|---|---|
| | Concentration, mg/l | | | | | |
| 7-2-80 samples | | | | | | |
| Comb. effl. | 20 | 9.9 | | < 0.01 | <0.01 | 92 |
| Clar. effl. | | | 267 | | | 101 |
| Neut. CWW | 9 | | | | | 335 |

Meter Vault #3, total phosphate, as P --- less than 0.01 mg/l

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035117

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

July 3, 1980

Dirk Dunning
Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

Laboratory Report No. 800653

Subject: Laboratory analyses of wastewater samples.
Samples collected: June 23 & 24, 1980
Samples received: June 24, 1980

| | Concentration, mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 6-23-80 sample Combined effl. | 22 | 9.3 | | 0.04 | < 0.01 | 72 |
| 6-23-80 Meter Vault #3 total phosphate, as P -- 0.04 mg/l | | | | | | |
| 6-24-80 samples Combined effl. | 51 | 12 | | < 0.01 | < 0.01 | 66 |
| Clari. effl. | | | 195 | | | 82 |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035118

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

July 3, 1980

Dirk Dunning
Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

Laboratory Report No. 800664

Subject: Laboratory analyses of wastewater samples.
Samples collected: June 27, 1980
Samples received: June 27, 1980

| | Concentration, mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $\bar{F}$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 6-27-80 samples<br>Comb. effl. | 65 | 8.6 | | 0.02 | < 0.01 | 64 |
| Clari. effl. | | | 212 | | | 81 |
| Neut. CWW | 24 | | | | | 233 |

Meter Vault #3, total phosphate, as P — 0.33 mg/l

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035119

To DIRK

# aqua tech laboratories, inc.

LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

July 3, 1980

Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

STATEMENT No. 800626

Laboratory analyses of wastewater samples received during the month of June, 1980.

Re: Dirk Dunning
Purchase order No. 23027

| Analysis | Unit price | No. of samples | Extended amount |
|---|---|---|---|
| BOD & S. S. | $28.00 | 21 | $588.00 |
| BOD | 25.00 | 11 | 275.00 |
| Fluoride | 12.00 | 8 | 96.00 |
| Total chromium | 12.00 | 8 | 96.00 |
| Chromium(VI) | 12.00 | 8 | 96.00 |
| COD | 18.00 | 20 | 360.00 |
| Total phosphate | 17.00 | 5 | 85.00 |
| | | Total | $1596.00 |

Tuki -
This bill is approved for payment.
Dirk Dunning

AQUA-TECH LABORATORY, INC.
C. L. Chang
C. L. Chang, President

SCOEPA00035120

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

NAME WACKER SILTRONIC CORP.

ADDRESS 22 N.W. FRONT AVE.
PORTLAND, OREGON 97229

FACILITY SAME AS ABOVE

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158 - R0073

| (2-16) | (17-19) |
|---|---|
| SR-00 58-9 | 003 |
| PERMIT NUMBER | DISCHARGE NUMBER |

2834-J
FILE NO. 93450

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 6 | 1 | TO | 80 | 6 | 31 |
| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROCESS WASTEWATER FLOW | SAMPLE MEASUREMENT | 648 | 1130 | $m^3$/day | — | — | — | — | 0 ~~30~~ | CONT. | CONT. RECORDER |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | 0 ~~3~~ | DAILY | TOTALIZ. RECORDER |
| BOD | SAMPLE MEASUREMENT | 46.6 | 62.9 | Kg/day | 27 | 64 | 81 | mg/l | 7 | 2 per week | 24 hr COMP. |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | | weekly | 24 hr COMP. |
| TSS | SAMPLE MEASUREMENT | 27.2 | 46.3 | Kg/day | 17 | 38 | 65 | mg/l | 5 | 2 per week | 24 hr COMP. |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | | weekly | 24 hr COMP. |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.04 | 0.3 | Kg/day | <0.01 | 0.04 | 0.35 | mg/l | 1 | 2 per week | 24 hr COMP. |
| | PERMIT REQUIREMENT | 0.01 | 0.05 | | — | 0.02 | 0.05 | | | weekly | 24 hr COMP. |
| $Cr^{total}$ | SAMPLE MEASUREMENT | 0.05 | 0.4 | Kg/day | <0.01 | 0.06 | 0.49 | mg/l | 0 | 2 per week | 24 hr COMP. |
| | PERMIT REQUIREMENT | 0.2 | 0.5 | | — | 0.3 | 1.0 | | | weekly | 24 hr COMP. |
| $F^-$ | SAMPLE MEASUREMENT | 7.7 | 15.3 | Kg/day | 3.6 | 10 | 22 | mg/l | 1 | 2 per week | 24 hr COMP. |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6 | 20 | | | weekly | 24 hr COMP. |
| pH | SAMPLE MEASUREMENT | — | — | — | 4.5 | — | 8.2 | pH units | 1 | daily | CONT. |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | daily | CONT. |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.) | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)



SCOEPA00035121

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME WAGNER SILTRONIC CORP.
ADDRESS 7200 N.W. FRONT AVE
PORTLAND, OREGON 97229

FACILITY SAME AS ABOVE
LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)
DISCHARGE MONITORING REPORT (*DMR*)

Form Approved
OMB No. 158 - R0072

| (2-16) | (17-19) |
|---|---|
| 0[illegible] | 003 |
| PERMIT NUMBER | DISCHARGE NUMBER |

2834-J
File No 93450

MONITORING PERIOD

| FROM | | | TO | | |
|---|---|---|---|---|---|
| 30 | 6 | 1 | 80 | 6 | 31 |
| YEAR (20-21) | MO (22-23) | DAY (24-25) | YEAR (26-27) | MO (28-29) | DAY (30-31) |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling Water & Boiler Blowdown Total $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | 0.04 | 1.0 | 3.2 | mg/l | 0 | weekly | grab |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | | weekly | grab |
| Flow | SAMPLE MEASUREMENT | 297 | 365 | $m^3$/day | — | — | — | — | 0 | daily | totaling recorded |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | daily | totaling recorded |
| | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 6.4 | — | 8.3 | pH units | 0 | weekly | grab |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | weekly | grab |
| Temperature | SAMPLE MEASUREMENT | — | — | — | 13 | 15 | 18 | °C | 0 | weekly | grab |
| | PERMIT REQUIREMENT | — | | | — | — | 27 | | | weekly | grab |
| Free Avail. Chlorine | SAMPLE MEASUREMENT | — | — | — | — | — | — | mg/l | 0 | None Required | Grab |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | | during chlorinat. | Grab |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE AREA CODE | TELEPHONE NUMBER | DATE YEAR | DATE MO | DATE DAY |
|---|---|---|---|---|---|---|---|
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)



SCOEPA00035122

CH2M HILL

SUBJECT _____ BY _____ DATE _____

SHEET No. _____ OF _____

PROJECT No. _____

| | TIME | ORGANIC NEUT. WW | COMBINED EFFLUENT | ORGANIC NEUT WW TOTAL | COMBINED EFFLUENT TOTAL IN GAL./DAY | |
|---|---|---|---|---|---|---|
| 5/14/80 | 1200-1400 | 6120 51 | 19210 160 | 39.268 | 106,990 | |
| | 1400-1630 | 10588 70.6 | 20690 137.9 | | | |
| | 1630-2030 | 14290 59.5 | 42630 177.6 | | | |
| | 2030 2300 | 8270 55.1 | 23560 157.1 | | | |
| 5/15/80 | 2300-0930 | 2550 4.05 | 78410 124.5 | 47,320 | 217,190 | |
| | 0930-1200 | 8240 54.9 | 24550 163.7 | | | |
| | 1200 1630 | 13560 50.2 | 43980 162.9 | | | |
| | 1630 2000 | 11720 55.8 | 37350 177.9 | | | |
| | 2000 2330 | 11250 53.6 | 32900 156.7 | | | |
| 5/16/80 | 2330-0730 | 350 0.7 | 50540 105.3 | 53,200 | 200,200 | |
| | 0730 1200 | 9570 35.4 | 41550 154.0 | | | |
| | 1200 1630 | 8850 32.8 | 43640 161.6 | | | |
| | 1630 2200 | 12520 37.9 | 55740 168.9 | | | |
| | 2200 2400 | 1910 15.9 | 8730 72.8 | → all weekend | | |
| 5/19/80 | 2400-0730 | 2270 0.7 | 217,760 65.4 | 70,730 | 323,860 | ← weekend |
| | 0730-1200 | 12870 47.7 | 31900 118.1 | | | |
| | 1200 1615 | 13.175 51.7 | 33010 129.5 | | | |
| | 1615-2015 | 12420 51.8 | 41190 171.6 | | | |
| 5/20/80 | 2015-730 | 12520 19.5 | 104150 154.3 | 266480 | 182,610 | |
| | 0730-1200 | 8960 33.2 | 47960 177.6 | | | |
| | 1200 1615 | 5000 19.6 | 30500 119.6 | | | |
| | | | ← problem with VACUUM SYSTEM | | | |
| 5/21/80 | 1615-0730 | 22720 24.8 | 24,970 27.3 | 63760 | 161,240 | |
| | 0730-1200 | 11000 40.7 | 42150 156.1 | | | |
| | 1200 1500 | 8240 45.8 | 24590 136.6 | | | |
| | 1500-2315 | 21,800 44.0 | 69.530 140.5 | | | |
| 5/22/80 | 0730-1625 | NO RECORD - WAS AT WORK WITH TCE AND NO, | | | | |
| | 2315-1625 | 20760 | 139940 | 39.770 | 210260 | |
| | 1625-2345 | 19.010 | 70.320 | | | |
| 5/23/80 | 2345-0730 | 8.150 | 42970 | 54540 | 198.990 | |
| | 0730-1200 | 11000 | 42150 | | | |
| | 1200 1530 | 8,240 | 24,590 | | | |
| | 1530 2400 | 27150 | 89280 | | | |
| 5/27/80 | 2400-0730 | 29560 | 216040 | 70780 | 363210 → 24+25+26+27 | HOLIDAY |
| | 0730 1400 | 17480 | 56120 | | | |
| | 1400 1830 | 13.230 | 48860 | | | |
| | 1830-2400 | 10.510 | 42190 | | | |

SCOEPA00035123

CH2M HILL

SUBJECT _____ BY _____ DATE _____

SHEET NO ____ OF ____

PROJECT NO. _____

| | | ORGANIC NEUT. WW | COMBINED EFFLUENT | | |
|---|---|---|---|---|---|
| 5/30/80 | 2330-0745 | 4670 | | totalizer being repaired | |
| | 0745-1030 | 8660 | | | |
| 5/31/80 | no info. - due to totalizers being repaired | | | | |
| 6/2/80 | 0745-1630 | 28170 | 72770 | 52900 | 141230 |
| | 1630-2330 | 24730 | 68560 | | |
| 6/3/80 | 2330-0745 | 26890 | 20180 | 67140 | 252340 |
| | 0745-1200 | 10310 | 102140 | | |
| | 1200-1600 | 5860 | 36890 | | |
| | 1600-2330 | 24080 | 93130 | | |
| 6/4/80 | 2330-0745 | 12580 | 66300 | | |
| | 0745-1200 | 9720 | 45690 | | |

SCOEPA00035124

June

| | 7:30 A.M.-8:00 A.M. | 23:30 P.M. |
|---|---|---|
| 1 | 4955360 | |
| 30 | 4731200 | 4847720 |
| 29 | — | — |
| 28 | 4575040 | |
| 27 | 4385210 | 4523940 |
| 26 | 4170050 | 4324010 |
| 25 | 3958480 | 4106420 |
| 24 | 3743020 | 3894330 |
| 23 | 3512060 | 3665920 |
| 22 | — | — |
| 21 | — | — |
| 20 | 3171810 | 3310690 |
| 19 | 2987830 | 3107100 |
| 18 | 2772310 | 2927300 |
| 17 | 2554100 | 2707800 |
| 16 | 2345980 | 2483690 |
| 15 | — | — |
| 14 | — | — |
| 13 | 2049720 | — |
| 12 | 1882640 | 2014120 |
| 11 | 1656290 | 1808190 |
| 10 | 1430980 | 1584600 |
| 9 | 1196460 | 1368080 |
| 8 | — | — |
| 7 | — | — |
| 6 | 885610 | — |
| 5 | 652970 | — |
| 4 | 409970 | 596150 |
| 3 | 161510 | 343670 |
| 2 | 0 | 141330 |
| 1 | | |

| | 12-12 | 8-8 |
|---|---|---|
| 6/9/80 | | 234320 |
| 10 | | 225510 |
| 11 | | 226350 |
| 12 | | 167080 |
| 13 | | 296260 |
| 14 | | |
| 15 | | |
| 16 | | 208120 |
| 17 | | 223200 |
| 18 | | 210520 |
| 19 | | 183880 |
| 20 | | 338250 |
| 21 | | |
| 22 | | |
| 23 | | 230960 |
| 24 | | 215460 |
| 25 | | 211570 |
| 26 | | 215160 |
| 27 | | |
| 28 | | |
| 29 | | |
| 30 | | |

| | 6/13/80 | NEUT FLOW | COMB. EFF |
|---|---|---|---|
| 6/16/80 | 1600 – 0800 | 60.590 | 231.350 → WEEKEND |
| | 0800 - 1200 | 10.600 | 37650 |
| | 1200 - 1600 | 14.980 | 46370 |
| | 1600 - 2300 | 23.730 | 53690 |
| | DAILY TOTAL | 49.310 | 137.710 |
| 6/17/80 | 2300 - 0800 | 31.300 | 70.410 |
| | 0800 - 1200 | 12.390 | 32.140 |
| | 1200 - 1600 | 14860 | 45.580 |
| | 1600 - 2330 | 18.830 | 71.000 |
| | DAILY TOTAL | 77.380 | 224.100 |
| 6/18/80 | 2330 - 0730 | 23.030 | 69.510 |
| | 0730 - 1200 | 11.000 | 47.990 |
| | 1200 1600 | 8.690 | 34060 |
| | 1600 2330 | 24.230 | 73040 |
| | DAILY TOTAL | 66.950 | 219.500 |
| 6/19/80 | 2330 - 0730 | 26.960 | 60.530 |
| | 0730 - 1200 | 5.950 | 27.470 |
| | 1200 1615 | 6.840 | 35.550 |
| | 1615 - 2330 | 17.010 | 56250 |
| | DAILY TOTAL | 56.780 | 179.700 |
| 6/20/80 | 2330 - 0800 | 19000 | 64.710 |
| | 0800 - 1200 | 7.930 | 36.270 |
| | 1200 - 1600 | 8610 | 35640 |
| | 1600 2330 | 23070 | 66970 |
| | DAILY TOTAL | 58.610 | 203'590 |
| ~~WEEKLY TOTAL~~ | | ~~309.670~~ | ~~861.610~~ |

weekly total

1600 (6/13/80) to 2330 (6/20/80) = 369.620 → NEUT OWW

" " " " " = 1195.950 → COMB. EFF

WEEKS TOTAL NEUT FLOW = 1.565570

SCOEPA00035127

| | | NEUT. OWW | COMB EFFL. |
|---|---|---|---|
| 6/9/80 | 0745 – 1200 | 11650 | 51280 |
| | 1200 - 1630 | 9810 | 44090 |
| | 1630 - 2345 | 20810 | 76250 |
| | DAILY TOTAL | 42.270 | 171.620 |
| 6/10/80 | 2345 - 0800 | 25170 | 62700 |
| | 0800 1200 | 12100 | 38360 |
| | 1200 1545 | 10040 | 34430 |
| | 1545 2330 | 23930 | 81030 |
| | DAILY TOTAL | 70.240 | 216520 |
| 6/11/80 | 2330 - 0745 | 22230 | 71690 |
| | 0745 - 1200 | 10940 | 40130 |
| | 1200 - 1730 | 7700 | 31410 |
| | 1730 - 2330 | 17570 | 53870 |
| | DAILY TOTAL | 65.080 | 223590 |
| 6/12/80 | 2330 - 0730 | 23090 | 74450 |
| | 0730 - 1200 | 9900 | 41620 |
| | 1200 1630 | 10010 | 39860 |
| | 1630 2330 | 25390 | 50.000 |
| | DAILY TOTAL | 68380 | 205.930 |
| 6/13/80 | 2330 - 0800 | 21,560 | 35.600 |
| | 0800 - 1200 | 7,550 | 28.800 |
| | 1200 - 1600 | 10.860 | 36110 |
| | 1600 - 2100 | NO DATA | NO DATA |
| | DAILY TOTAL | 39970 | 100510 |
| | ~~WEEKLY TOTAL~~ | ~~285.940~~ | 918.170 |

WEEKLY TOTAL

1615 (6/6/80) to 2330 (6/13/80) = 339.041 NEUT OWW

" " " " " = 1142.710 COMB EFF

WEEKS TOTAL NET FLOW = 1,481,751

SCOEPA00035128

| | | OWW NEUT | CO. MIXED EFF. | |
|---|---|---|---|---|
| 6/20/80 | 2300 - 0730 | 38.010 | 199.370 | → WEEKEND |
| | 0730 - 1200 | 11.040 | 36.190 | |
| | 1200 - 1600 | 9.710 | 36.780 | |
| | 1600 - 2330 | 20.980 | 80.590 | |
| | DAILY TOTAL | 41.730 | 153.860 | |
| 6/24/80 | 2300 - 0730 | 23.200 | 77.100 | |
| | 0730 1200 | 9.110 | 64.750 | |
| | 1200 - 1600 | 12.310 | 42.880 | |
| | 1600 - 2330 | 18420 | 24.680 | |
| | DAILY TOTAL | 64.370 | 228410 | |
| 6/25/80 | 2330 - 0745 | 19.910 | 64.150 | |
| | 0745 - 1200 | 11.540 | 61.030 | |
| | 1200 - 1630 | 6.230 | 33.860 | |
| | 1630 2330 | 14790 | 53.050 | |
| | Daily Total | 52.470 | 212090 | |
| 6/26/80 | 2330 - 0730 | 24540 | 63.630 | |
| | 0730 - 1200 | 10320 | 40.590 | |
| | 1200 1615 | 10.570 | 45.470 | |
| | 1615 - 2330 | 20.790 | 67900 | |
| | Daily Total | 66220 | 217590 | |
| 6/27/80 | 2330 - 0730 | 25190 | 61200 | |
| | 0730 - 1200 | 12770 | 30.950 | |
| | 1200 - 1600 | 11.130 | 37890 | |
| | 1600 2100 | 14620 | 48780 | |
| | 2100 - 2400 | 7060 | 21 110 | |
| | Daily total | 70750 | 199930 | |

WEEKLY TOTAL -

2300 (6/20/80) to 2400(6/27/80) = 333.550 → NEUT OWW

" " " " " = 1,211.250 → COMB EFF

WEEKS TOTAL FLOW = 1548 00

MONTH OF JUNE 1980 = 1466250 → NEUT OWW

4955260 → COMB EFF

TOTAL 6,421,510

SCOEPA00035129

| | FLOW gpd / m³/day | BOD mg/l | TSS | $Cr^{6+}$ | $Cr^{total}$ | $F^-$ | pH |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | * 161510 | 611.4 | | | | | |
| 3 | * 248460 | 940.5 27 | 29 kg/day | <0.01 | <0.01 | 9.8 | |
| 4 | 243,080 | 919.9 30.5 | 32.8 | | | 11.1 | |
| 5 | 232640 | 880.6 | | | | | |
| 6 | 310850 | 392.2 81 | 59 | <0.01 | <0.01 | 8.6 | |
| 7 | (103617 each) | 392.2 31.8 | 23.1 | | | 3.4 | |
| 8 | | 392.2 | | | | | |
| 9 | 234320 | 887.0 | | | | | |
| 10 | 225510 | 853.6 62 | 26 | 0.35 | 0.49 | 6.3 | |
| 11 | 226350 | 856.8 52.9 | 22.2 | 0.3 | 0.42 | 5.4 | |
| 12 | 167080 | 632.5 67 | 33 | <0.01 | <0.01 | 3.6 | |
| 13 | 296260 | 373.8 42.4 | 20.9 | | | 2.3 | |
| 14 | 98753 each | 373.8 | | | | | |
| 15 | | 373.8 | | | | | |
| 16 | 208120 | 787.8 | | | | | |
| 17 | 223200 | 844.9 | | | | | |
| 18 | 210520 | 796.9 | | | | | |
| 19 | 183880 | 696.1 76 | 17 | <0.01 | <0.01 | 22 | |
| 20 | 338250 | 426.8 52.9 | 11.8 | | | 15.3 | |
| 21 | 112750 each | 426.8 | | | | | |
| 22 | | 426.8 | | | | | |
| 23 | 230960 | 874.3 72 | 22 | <0.01 | 0.04 | 9.3 | |
| 24 | 215460 | 815.6 66 53.8 | 19.2 51 | <0.01 | 0.03 <0.01 | 8.1 12 | |
| 25 | 211570 | 800.9 | 41.6 | | | 9.8 | |
| 26 | 215160 | 814.5 | | | | | |
| 27 | 188160 | 712.3 64 | 65 | <0.01 | 0.02 | 8.6 | |
| 28 | 338160 | 640.0 45.6 | 46.3 | | 0.01 | 6.1 | |
| 29 | | 640.0 | | | | | |
| 30 | 224160 | 848.5 | | | | | |
| TOTAL | | 515 | 302 | 0.35 | 0.53 | 80.2 | |
| AVG | | 64 46.6 | 38 27.2 | 0.04 | 0.06 0.04 | 10.0 7.7 | |

| | | | | |
|---|---|---|---|---|
| 3 | 161510 | 26 | 4170,050 | 1.29 |
| 4 | 409970 | 27 | 4358210 | 3.2 |
| 5 | 652970 | 28 | 4375040 | |
| 6 | 885610 | 29 | — | 0.09 |
| 7 | — | 30 | 4731200 | 0.33 |
| 8 | — | 1 | 4955.360 | |
| 9 | 1196460 | | | 0.04 |

SCOEPA00035130

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

June 27, 1980

Dirk Dunning
Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

Laboratory Report No. 800647

Subject: Laboratory analyses of wastewater samples.
Samples collected: June 19, 1980
Samples received: June 19, 1980

| | Concentration, mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 6-19-80 samples Comb. effl. | 17 | 22 | | < 0.01 | < 0.01 | 76 |
| Clari. effl. | | | 358 | | | 178 |
| Neut. CWW | 7.5 | | | | | 337 |
| Silicon sump | | | 1180 | | | 570 |

Meter Vault #3 -- total phosphate, as P -- 0.09 mg/l

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035131

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

June 20, 1980

Dirk Dunning
Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

Laboratory Report No. 800629

Subject: Laboratory analyses of wastewater samples.
Samples collected: June 12 & 13, 1980
Samples received: June 12 & 13, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 6-12-80 samples | | | | | | |
| Comb. Effl. | 33 | 3.6 | | < 0.01 | < 0.01 | 67 |
| Clri. effl. | | | 288 | | | 136 |
| Neut. CWW | 13 | | | | | 113 |
| Silicon sump | | | 800 | | | 336 |
| Meter Vault #3 -- total phosphate, as P -- 3.2 mg/l | | | | | | |
| 6-13-80 sample | | | | | | |
| Lapping room | 38 | | 4620 | | | 2600 |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035132

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

June 20, 1980

Dirk Dunning
Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

Laboratory Report No. 800623

Subject: Laboratory analyses of wastewater samples.
Samples collected: June 10, 1980
Samples received: June 10, 1980

| | Concentration, in mg/l | | |
|---|---|---|---|
| Sample | BOD-5 | COD | TSS |
| 6-10-80 samples | | | |
| #1 | 117 | 484 | 4540 |
| #2 | 10 | 25 | 1270 |
| #3 | 950 | 1740 | 1300 |
| #4 | 9 | 16 | 485 |
| #5 | 1730 | 2640 | 3.3 |
| #6 | 9600 | 14560 | 54 |
| #7 | 11 | 115 | 402 |
| #8 | 124800 | 188500 | 52640 * |

* Sample #8, some suspended solids caked in bottle.

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035133

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

June 20, 1980

Dirk Dunning
Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

Laboratory Report No. 800618

Subject: Laboratory analyses of wastewater samples.
Samples collected: June 10, 1980
Samples received: June 10, 1980

| | | | Concentration, in mg/l | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 6-10-80 samples | | | | | | |
| Comb. effl. | 26 | 6.3 | | 0.49 | 0.35 | 62 |
| Clari. effl. | | | 312 | | | 129 |
| Silicon sump | | | 1090 | | | 570 |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035134

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

June 13, 1980

Dirk Dunning
Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

Laboratory Report No. 800616

Subject: Laboratory analyses of wastewater samples.
Samples collected: June 6, 1980
Samples received: June 6, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 6-6-80 samples<br>Comb. effl. | 59 | 8.6 | | < 0.01 | < 0.01 | 81 |
| Clari. effl. | | | 195 | | | 105 |
| Neut. CWW | 19 | | | | | 365 |
| Silicon sump | | | 397 | | | 169 |

Meter Vault #3 -- total phosphate, as P -- 1.29 mg/l

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President

water & wastewater analyses

SCOEPA00035135

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

June 13, 1980

Dirk Dunning
Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

Laboratory Report No. 800606

Subject: Laboratory analyses of wastewater samples.
Samples collected: June 3, 1980
Samples received: June 3, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 6-3-80 samples | | | | | | |
| Comb. Effl. | 29 | 9.8 | | <0.01 | <0.01 | 27 |
| Clari. effl. | | | 235 | | | 97 |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035136

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

June 6, 1980

Dirk Dunning
Wacker Siltronic
P. O. Box 03180
Portland, Oregon 97203

Laboratory Report No. 800553

Subject: Laboratory analyses of wastewater samples.
Samples collected: May 28, 1980
Samples received: May 28, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 5-28-80 samples Combined effl. | 12.7 | 10.3 | | < 0.01 | < 0.01 | 24 |
| Clari. effl. | | | 181 | | | 77 |
| Silicon sump | | | 1070 | | | 470 |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035137

'TTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME WACKER SILTRONIC CORP.

ADDRESS 7200 N.W. FRONT AVE.
PORTLAND, OREGON 97229

FACILITY SAME AS ABOVE

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)

**DISCHARGE MONITORING REPORT (*DMR*)**

*Form Approved OMB No. 158 - R0072*

(2-16) PERMIT NUMBER: OR-00[illegible]-0

(17-19) DISCHARGE NUMBER: 002

2834-J
File No. 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 90 | 05 | 1 | TO | 95 | 05 | 31 |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater - Flow | SAMPLE MEASUREMENT | 550.0 | 812.8 | $m^3$/day | — | — | — | — | — | CONT | CONT. RECORDER |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | DAILY | |
| BOD | SAMPLE MEASUREMENT | 32.6 | 55.3 | kg/day | ~~22 16.4~~ | ~~3~~ 46.2 | 77 | mg/l | 4 | weekly | 24hr COMP. |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | — | weekly | 24hr COMP. |
| TSS | SAMPLE MEASUREMENT | 41.6 | 76.9 | kg/day | 12.7 | 57.8 | 107 | mg/l | 5 | weekly | 24hr COMP. |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | — | weekly | 24hr COMP. |
| $Cr^{6+}$ | SAMPLE MEASUREMENT | 0.01 | 0.02 | kg/day | <0.01 | 0.01 | 0.03 | mg/l | 0 | weekly | 24hr COMP. |
| | PERMIT REQUIREMENT | 0.01 | 0.05 | | — | 0.02 | 0.05 | | — | weekly | 24hr COMP. |
| Cr total | SAMPLE MEASUREMENT | 0.01 | 0.04 | kg/day | <0.01 | 0.02 | 0.04 | mg/l | 0 | weekly | 24hr COMP. |
| | PERMIT REQUIREMENT | 0.2 | 0.5 | | — | 0.3 | 1.0 | | — | weekly | 24hr COMP. |
| $F^-$ | SAMPLE MEASUREMENT | 9.2 | 19.4 | kg/day | 6.7 | 13.2 | 27 | mg/l | 2 | weekly | 24hr COMP. |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6 | 20 | | — | weekly | 24hr COMP. |
| pH | SAMPLE MEASUREMENT | — | — | — | 6.0 | — | 8.1 | pH units | 0 | daily | CONT |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | — | daily | CONT |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | | TELEPHONE | DATE |
|---|---|---|---|---|
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE / NUMBER | YEAR / MO / DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)



SCOEPA00035138

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME WACKER SILTRONIC CORP.

ADDRESS 7200 N.W. FRONT AVE

PORTLAND, OREGON 97229

FACILITY SAME AS ABOVE

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)

DISCHARGE MONITORING REPORT (*DMR*)

*Form Approved*
*OMB No. 158 - R0073*

| (2-16) | (17-19) |
|---|---|
| CR-00305 [illegible] | 002 |
| PERMIT NUMBER | DISCHARGE NUMBER |

2834-J

File No. 93450

MONITORING PERIOD

| FROM | YEAR (20-21) | MO (22-23) | DAY (24-25) | TO | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| | 80 | 5 | 1 | | 80 | 5 | 31 |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling Water & Boiler Blowdown Total $PO_4^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | — | 0.6 | 2.0 | mg/l | 0 | weekly | grab |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | — | weekly | grab |
| Flow | SAMPLE MEASUREMENT | 310 | 385 | $m^3$/day | — | — | — | — | — | daily | total recorder |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | daily | total recorder |
| | SAMPLE MEASUREMENT | — | — | — | — | — | — | — | — | — | — |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | — | — |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 7.0 | — | 9.0 | pH units | 0 | weekly | grab |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | weekly | grab |
| Temperature | SAMPLE MEASUREMENT | — | — | — | 9 | 13 | 16 | °C | 0 | weekly | grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | — | weekly | grab |
| Free Avail. Chlorine | SAMPLE MEASUREMENT | — | — | — | — | — | — | mg/l | 0 | none required | grab |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | — | during chlorinat | grab |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR, INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE AREA CODE | NUMBER | DATE YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)



SCOEPA00035139

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

May 27, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800530

Subject: Laboratory analyses of wastewater samples.
Samples collected: May 19, 1980
Samples received: May 19, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 5-19-80 samples Combined effl. | 62 | 12.2 | | 0.04 | 0.03 | 22 |
| Clari. effl. | | | 206 | | | 73 |
| Neut. CWW | 8.0 | | | | | 177 |
| Silicon sump | | | 920 | | | 360 |

Meter Vault #3 -- total phosphate, as P, 0.54 mg/l

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035140

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

May 19, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800518

Subject: Laboratory analyses of wastewater samples.
Samples collected: May 13, 1980
Samples received: May 13, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 5-13-80 samples Combined effl. | 107 | 27 | | 0.04 | 0.03 | 77 |
| Clari. effl. | | | 169 | | | 53 |
| Neut. CWW | 93 | | | | | 109 |
| Silicon sump | | | 1020 | | | 364 |

Meter Vault #3 -- total phosphate, as P, 0.005 mg/l

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035141

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

May 19, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800524

Subject: Laboratory analyses of wastewater samples.
Samples collected: May 14, 1980
Samples received: May 14, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 5-14-80 samples Combined effl. | 74 | 7.7 | | 0.01 | 0.01 | 63 |
| Clari. effl. | | | 194 | | | 66 |
| Silicon sump | | | 530 | | | 240 |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035142

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

May 12, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800504

Subject: Laboratory analyses of wastewater samples.
Samples collected: May 5, 1980
Samples received: May 5, 1980

Concentration, in mg/l

| Sample | TSS | F⁻ | COD | T-Cr | Cr(VI) | BOD-5 |
|---|---|---|---|---|---|---|
| 5-5-80 samples Combined effl. | 35 | 6.7 | | 0.017 | < 0.01 | 35 |
| Neut. CWW | 23 | | | | | 195 |
| Silicon sump | | | 1440 | | | 480 |

Meter Vault -- total phosphate, as P, 0.03 mg/l

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President

water & wastewater analyses

SCOEPA00035143

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

May 12, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800509

Subject: Laboratory analyses of wastewater samples.
Samples collected: May 7, 1980
Samples received: May 7, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TSS | $F^-$ | COD | T-Cr | Cr(VI) | BOD-5 |
| 5-7-80 samples<br>Combined effl. | 56 | 15 | | < 0.01 | < 0.01 | 56 |
| Clari. effl. | | | 155 | | | 47 |
| Silicon sump | | | 1500 | | | 640 |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035144

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

May 5, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800460

Subject: Laboratory analyses of wastewater samples.
Samples collected: April 25, 1980
Samples received: April 25, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TS | TSS | $F^-$ | COD | T-Cr | BOD-5 |
| 4-25-80 samples | | | | | | |
| Combined effl. | | 22 | 7.4 | | < 0.01 | 67 |
| Neut. CWW | | 9.0 | | | | 188 |
| Clari. underflow | 11300 | 860 (VS) | 510 | | 15.6 | |
| Clari. effl. | 1630 | 26 | 44 | | | |
| WAD | 229 | 5.6 | < 0.1 | 109 | 0.02 | |
| CWW | 1460 | 1.0 | < 0.1 | 1010 | | 195 |
| CAD | 186 | < 0.1 | 96 | | 1.68 | |
| CCW | 8620 | 1.7 | 12 | 105 | 0.05 | |
| Silicon solids | 494 | 355 | < 0.1 | 960 | | |

Combined effl. --- Chromium (VI), less than 0.01 mg/l.

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035145

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

May 5, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800456

Subject: Laboratory analyses of wastewater samples.
Samples collected: April 24, 1980
Samples received: April 25, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TS | TSS | $F^-$ | COD | T-Cr | BOD-5 |
| 4-24-80 samples | | | | | | |
| Clari. Underflow | 14480 | 1080 (VS) | 390 | | 14.6 | |
| Clari. effl. | 1310 | 51 | 20 | 244 | 0.02 | |
| WAD | 176 | 20 | 0.9 | 122 | 0.02 | 27 |
| OWW | 1260 | 5.5 | 0.1 | 950 | | 169 |
| CAD | 36 | < 0.1 | 75 | 41 | 0.22 | |
| CCW | 7780 | 3.3 | 17 | 430 | | |
| Silicon solids | 837 | 455 | < 0.1 | | | |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035146

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

May 5, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800453

Subject: Laboratory analyses of wastewater samples.
Samples collected: April 23, 1980
Samples received: April 23, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TS | TSS | F⁻ | COD | T-Cr | BOD-5 |
| 4-23-80 samples | | | | | | |
| Neut. CWW | | 12 | | | | 105 |
| Clari. underflow | 55450 | 1460 (VS) | 840 | | 13.4 | |
| Clari. effl. | 1510 | 50 | 22 | 296 | 0.01 | |
| CWW | 2700 | 21 | 4.4 | 375 | | 200 |
| CAD | 102 | < 0.1 | 63 | 20 | 0.18 | |
| CCW | 6900 | 3.0 | 16 | 78 | | |
| Silicon solids | 1050 | 815 | < 0.1 | 890 | | |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President

water & wastewater analyses

SCOEPA00035147

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME SILICONIX CORP.

ADDRESS 770 N.W. FRONT AVE.

PORTLAND, OREGON 97229

FACILITY SAME AS ABOVE

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)

**DISCHARGE MONITORING REPORT (*DMR*)**

*Form Approved*
*OMB No. 158 - R0073*

(2-16) OR-00 30[illegible]-9 — PERMIT NUMBER

(17-19) 001 — DISCHARGE NUMBER

2834-J
File No. 93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 80 | 4 | 1 | TO | 80 | 4 | 30 |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROCESS WASTEWATER FLOW | SAMPLE MEASUREMENT | 486 | 746 | $m^3$/day | — | — | — | — | — | CONT. | CONT. RECORDER |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | DAILY | TOTAL RECORDER |
| TSS | SAMPLE MEASUREMENT | 35.1 | 43.0 | Kg/day | 38 | 53 | 67 | mg/l | 6 | weekly | 24 hr COMP |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | — | weekly | 24 hr COMP |
| TSS | SAMPLE MEASUREMENT | 22.9 | 94.4 | Kg/day | 7.3 | 37.1 | 160 | mg/l | 1 | weekly | 24 hr COMP |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | — | weekly | 24 hr COMP |
| Cl$_2$ | SAMPLE MEASUREMENT | 0.02 | 0.08 | Kg/day | <0.01 | 0.03 | 0.11 | mg/l | 1 | weekly | 24 hr COMP |
| | PERMIT REQUIREMENT | 0.01 | 0.05 | | — | 0.02 | 0.05 | | — | weekly | 24 hr COMP |
| Cl$_2$ total | SAMPLE MEASUREMENT | 0.1 | 0.41 | Kg/day | <0.01 | 0.15 | 0.56 | mg/l | 0 | weekly | 24 hr COMP |
| | PERMIT REQUIREMENT | 0.2 | 0.5 | | — | 0.3 | 1.0 | | — | weekly | 24 hr COMP |
| TF | SAMPLE MEASUREMENT | 9.3 | 20.2 | Kg/day | 2.8 | 14.1 | 34 | mg/l | 2 | weekly | 24 hr COMP |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6 | 20 | | — | weekly | 24 hr COMP |
| pH | SAMPLE MEASUREMENT | — | — | — | 5.6 | — | 11.0 | pH units | 13 | daily | CONT. |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | — | daily | CONT. |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DAY |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)



SCOEPA00035148

PERMITTEE NAME/ADDRESS (*Include Facility Name/Location if different*)

NAME WACKER SILTRONIC CORP.
ADDRESS 776 N.W. FRONT AVE.
PORTLAND, OREGON 97229

FACILITY SAME AS ABOVE
LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (*NPDES*)
DISCHARGE MONITORING REPORT (*DMR*)

*Form Approved*
*OMB No. 158 - R0073*

2834-J
File No. 93450

| (2-16) | (17-19) |
|---|---|
| 0C0003051-9 | 001 |
| PERMIT NUMBER | DISCHARGE NUMBER |

MONITORING PERIOD

| FROM | YEAR (20-21) | MO (22-23) | DAY (24-25) | TO | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| | 50 | 4 | 1 | | 80 | 4 | 30 |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling Water & Boiler Blowdown Total PO4 | SAMPLE MEASUREMENT | — | — | — | <0.01 | 0.01 | 0.02 | mg/l | 0 | weekly | grab |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | — | weekly | grab |
| Flow | SAMPLE MEASUREMENT | | | m³/day | — | — | — | — | — | daily | totalizing recorder |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | daily | totalizing record |
| | SAMPLE MEASUREMENT | — | — | | — | — | — | | — | — | — |
| | PERMIT REQUIREMENT | — | — | — | — | — | — | — | — | — | — |
| COMBINED OUTFALL pH | SAMPLE MEASUREMENT | — | — | — | 6.3 | — | 7.9 | pH | 0 | weekly | grab |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | units | — | weekly | grab |
| Temperature | SAMPLE MEASUREMENT | — | — | — | 14 | 16 | 18 | °C | 0 | weekly | grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | — | weekly | grab |
| Free Available Chlorine | SAMPLE MEASUREMENT | — | — | — | 0 | 0 | 0 | mg/l | — | None required | grab |
| | PERMIT REQUIREMENT | — | — | | — | 0.2 | 0.5 | | — | during chlorinat. | grab |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. §1319. (*Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.*) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE AREA CODE | TELEPHONE NUMBER | DATE YEAR | DATE MO | DATE DAY |
|---|---|---|---|---|---|---|---|
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*)



SCOEPA00035149

1980

3/31 last part of day 2:30 P.M. - 8:00 A.M. 4/1 54,450

| | | | | |
|---|---|---|---|---|
| 4/1 | 117,375 | gallons - 5/1 10:30 am | 143,625 | |
| 4/2 | 126,375 | | 154,650 | |
| 4/3 | 154,800 | | 31,800 | |
| 4/4 | 144,075 | | 71,100 | |
| 4/5 | 45,375 | | 182,700 | * |
| 6 | 11,625 | | 214,725 | |
| * 7 | 156,675 | | 153,300 | * |
| 8 | 174,375 | | 152,475 | |
| * 9 | 184,200 | | 142,580 | |
| 10 | 146,025 | | 60,300 | |
| 11 | 174,450 | | 63,600 | |
| 12 | 66,150 | | 190,800 | |
| 13 | 21,600 | | 189,900 | * |
| * 14 | 172,200 | | 267,900 | |
| 15 | 190,500 | | 207,450 | |
| * 16 | 189,975 | | 184,200 | |
| 17 | 152,625 | | 89,415 | |
| 18 | 143,100 | | 96,570 | |
| 19 | 27,900 | | | |
| 20 | 28,800 | | | |
| * 21 | 192,600 | | | |
| 22 | 142,125 | | | |
| 23 | 197,100 | | | |
| 24 | 186,750 | | | |
| * 25 | 160,425 | | | |
| 26 | 64,800 | | | |
| 27 | 46,950 | | | |
| 28 | 122,625 | | | |
| 29 | 153,750 | | | |
| 30 | 159,510 | | | |

8AM 5/1/80 - to - 10:30 5/1/80 21,375

6.02

4 3/8 9.52

8.12

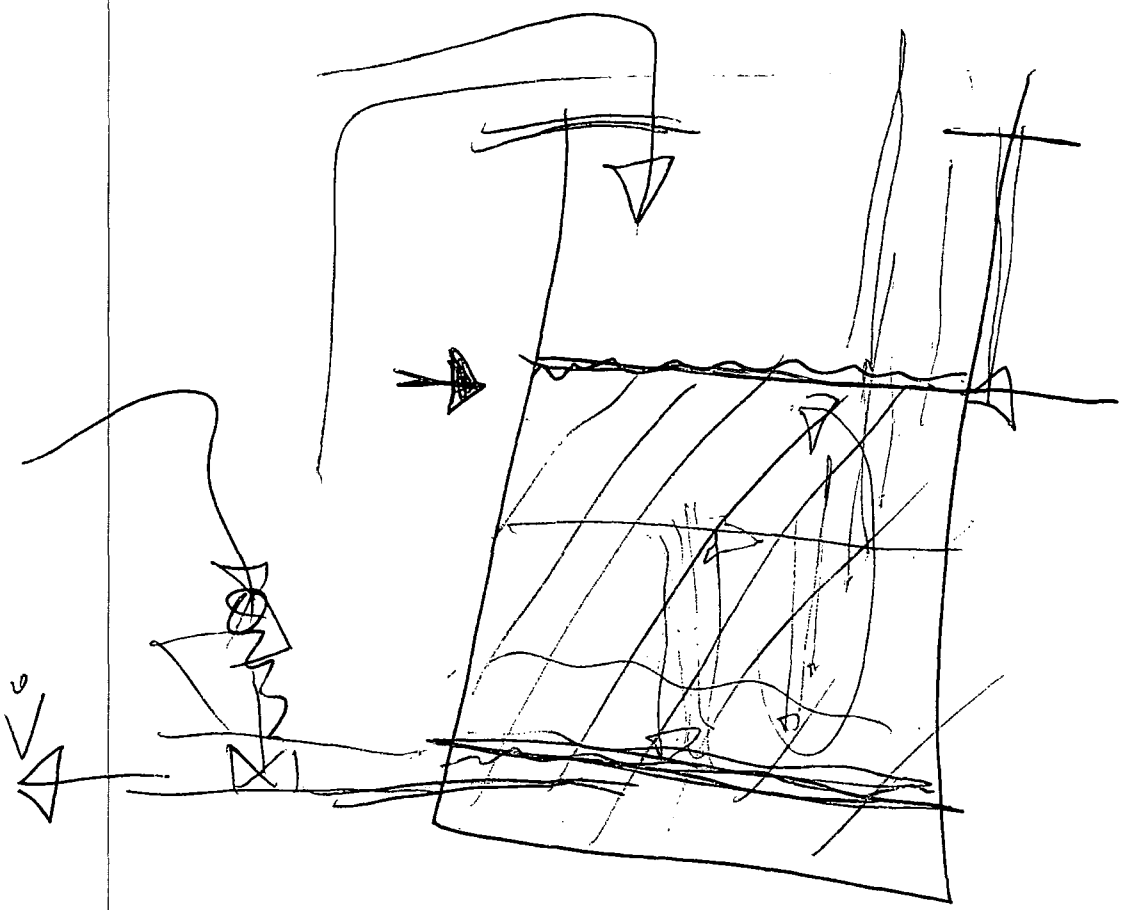
SCOEPA00035150

# May 1980 Comb Effluent

| | | | TSS | $F^-$ | $Cr^+$ | $Cr^{6+}$ | BOD |
|---|---|---|---|---|---|---|---|
| 1 | 143,625 | 543.7 | | | | | |
| 2 | 154,650 | 585.4 | | | | | |
| 3 | 31,800 | 120.4 | | | | | |
| 4 | 71,100 | 269.1 | | | | | |
| 5 | 182,700 | 691.6 | 35 / 24.2 | 6.7 / 4.6 | 0.017 / 0.012 | <0.01 | 35 / 24.2 |
| 6 | 214,725 | 812.8 | | | | | |
| 7 | 153,300 | 580.3 | 56 / 32.5 | 15 / 8.7 | <0.01 ⊘ | <0.01 ⊘ | 56 / 32.5 |
| 8 | 152,475 | 577.2 | | | | | |
| 9 | 142,500 | 539.4 | | | | | |
| 10 | 60,300 | 228.3 | | | | | |
| 11 | 63,000 | 238.5 | | | | | |
| 12 | 190,800 | 722.3 | | | | | |
| 13 | 189,900 | 718.8 | 107 / 76.9 | 27 / 19.4 | 0.04 / 0.03 | 0.03 / 0.02 | 77 / 55.3 |
| 14 | 207,900 | 787.0 | 74 / 58.2 | 7.7 / 6.0 | 0.01 / .008 | 0.01 / 0.008 | 6-3 / 49.6 |
| 15 | 207,450 | 785.3 | | | | | |
| 16 | 184,200 | 697.3 | | | | | |
| 17 | 89,415 | 338.5 | | | | | |
| 18 | 96,570 | 365.6 | | | | | |
| 19 | 210,250 | 795.9 | 62 / 49.3 | 12.2 / 9.7 | 0.04 / 0.03 | 0.03 / 0.02 | 22 / 17.5 |
| 20 | 103,430 | 391.5 | | | | | |
| 21 | 161,240 | 610.4 | | | | | |
| 22 | 210,260 | 795.8 | | | | | |
| 23 | 198,990 | 753.3 | | | | | |
| 24 | 90,802 | 343.7 | | | | | |
| 25 | 90,802 | 343.7 | | | | | |
| 26 | 90,802 | 343.7 | | | | | |
| 27 | 90,802 | 343.7 | | | | | |
| 28 | 180,000 | 681.4 | 12.7 / 8.7 | 10.3 / 7.0 | <0.01 ⊘ | <0.01 ⊘ | 24 / 16.4 |
| 29 | 180,000 | 681.4 | | | | | |
| 30 | 180,000 | 681.4 | | | | | |
| 31 | 180,000 | 681.4 | | | | | |
| | | 17048.8 | 249.8 | 55.4 | 0.08 | 0.048 | 195.5 |
| | | 550.0 | 41.6 / 57.8 | 9.2 / 13.2 | 0.013 / 0.02 | 0.008 / 0.012 | 463 / 32.6 |

SCOEPA00035151

2:30 P.M. 3/31 – 8:00 A.M. 4/1 54,450 gallons.



1980

MONTH

| | Flow Record | PH/Temp | COMBINED OUTFALL | | | |
|---|---|---|---|---|---|---|
| | 5 | | 6 | | 4 | |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | 70380.0 | ~~7.7/18~~ | | |
| 4 | | | | | | |
| 5 | | 7.0/15 | 70380.1 | | | |
| 6 | | | | ~~6.9/17~~ 7.5/13 | | |
| 7 | | 7.0/12 | | | | 6.8/18 |
| 8 | | | | | | |
| 9 | | 7.8/11 | | | | 7.9/17 |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | 8.3/18 | | |
| 13 | 76076 | 7.1/13 | | | | |
| 14 | | 8.8/14 | | | | 7.7/14 |
| 15 | | | | | | |
| 16 | | | | | | 6.3/16 |
| 17 | | | | | | |
| 18 | | | | | | 7.5/18 |
| 19 | | 8.2/16 | | 6.4/14 | | |
| 20 | | | | | | |
| 21 | | | | | | 7.2/14 |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | — | 7.0/15 |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | 9.0/9 | | | | |
| 29 | | | | | | |
| 30 | | | | | | |
| 31 | | | | | | |

0.03
0.005
0.54
2.0

43/16

40/19 ~~[illegible]~~ 13 5.6 11.0

4/80

| | | GPD | $m^3/d$ | BOD | TSS | $Cr^{6+}$ | $Cr^{+}$ | $F^-$ |
|---|---|---|---|---|---|---|---|---|
| | 1 | 117,375 | 444.3 | | | | | |
| | 2 | 126,375 | 478.4 | | | | | |
| | 3 | 154,800 | 586.0 | | | | | |
| | 4 | 144,075 | 545.4 | | | | | |
| | 5 | 45,375 | 171.8 | | | | | |
| | 6 | 11,625 | 44.0 | | | | | |
| | 7 | 156,675 | 593.1 | 56 / 33.2 | 160 / 94.9 | <0.01 | 0.12 / 0.07 | 34 / 20.2 |
| | 8 | 174,375 | 660.0 | | | | | |
| 0.02 | 9 | 184,200 | 697.3 | 38 / 26.5 | 10 / 7.0 | ~~<~~0.01 | 0.01 / 0.007 | 11 / ~~8.0~~ 7.7 |
| | 10 | 146,025 | 552.8 | | | | | |
| | 11 | 174,450 | 660.4 | | | | | |
| | 12 | 60,150 | 227.7 | | | | | |
| | 13 | 21,600 | 81.8 | | | | | |
| | 14 | 172,200 | 651.8 | 42 / 27.4 | 7.3 / 4.8 | 0.02 / 0.013 | 0.03 / 0.02 | 2.8 / 1.8 |
| | 15 | 190,500 | 721.1 | | | | | |
| <0.01 | 16 | 189,975 | 719.1 | 55 / 39.6 | 13.5 / 9.7 | 0.04 / 0.03 | 0.16 / 0.12 | 8.3 / 6.0 |
| | 17 | 152,625 | 577.7 | | | | | |
| | 18 | 143,100 | 541.7 | | | | | |
| | 19 | 27,900 | 105.6 | | | | | |
| | 20 | 28,800 | 109.0 | | | | | |
| <0.01 | 21 | 192,600 | 729.1 | 59 / *43.0 | 10 / 7.3 | 0.11 / 0.08 | 0.56 / 0.41 | 21 / 15.3 |
| | 22 | 142,125 | 538.0 | | | | | |
| | 23 | 197,100 | *746.1 | | | | | |
| | 24 | 186,750 | 706.9 | | | | | |
| | 25 | 160,425 | 607.3 | *67 / 40.7 | 22 / 13.4 | <0.01 | <0.01 | 7.4 / 4.5 |
| | 26 | 64,800 | 245.3 | | | | | |
| | 27 | 46,950 | 177.7 | | | | | |
| | 28 | 122,625 | 464.2 | | | | | |
| | 29 | 153,750 | 582.0 | | | | | |
| | 30 | 159,510 | 603.8 | | | | | |
| | | | 14569.4 | 317 / 210.4 | 222.8 / 137.1 | 0.18 / 0.123 | 0.88 / 0.627 | 55.5 / 84.5 |
| | | | 485.6 | 52.8 / 35.1 | 37.1 / 22.9 | 0.03 / 0.02 | 0.15 / 0.10 | 14.1 / 9.3 |

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

April 28, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800448

Subject: Laboratory analyses of wastewater samples.
Samples collected: April 22, 1980
Samples received: April 22, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TS | TSS | $F^-$ | COD | T-Cr | BOD-5 |
| 4-22-80 samples | | | | | | |
| Clari. underflow | 64820 | 1490 (VS) | 1070 | | 8.1 | |
| Clari. effl. | 1240 | 26 | 30 | 269 | 0.016 | |
| WAD | 225 | 9.0 | 0.2 | 110 | 0.012 | 49 |
| CWW | 880 | 5.0 | 0.1 | 576 | | 266 |
| CAD | 164 | < 0.1 | 112 | 37 | 0.037 | |
| CCW | 18630 | 3.3 | 44 | 86 | | |
| Silicon solids | 1510 | 905 | < 0.1 | | | |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035155

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

April 28, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800443

Subject: Laboratory analyses of wastewater samples.
Samples collected: April 16, 1980
Samples received: April 18, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TS | TSS | $F^-$ | COD | T-Cr | BOD-5 |
| 4-16-80 samples | | | | | | |
| Comb. effl. | | 13.5 | 8.3 | | 0.16 | 55 |
| Neut. CWW | | 17 | | | | 148 |
| Clari. underflow | 42670 | 2340 (VS) | | | | |
| Clari. effl. | 1360 | 16 | 31 | | | |
| WAD stor. | 169 | 9.0 | 0.1 | 45 | 0.009 | 27 |
| CWW stor. | 319 | 12.5 | < 0.1 | 174 | | 97 |
| CAD, WW | 75 | < 0.1 | 55 | 33 | 0.034 | |
| CCW | 3420 | 6.0 | 38 | 50 | | |
| Silicon solids | 1180 | 660 | < 0.1 | 660 | | |

Meter vault — total phosphate, less than 0.01 mg/l as P
Comb. Effl. — Chromium (VI) , 0.04 mg/l

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035156

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

April 28, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800444

Subject: Laboratory analyses of wastewater samples/
Samples collected: April 21, 1980
Samples received: April 21, 1980

| | Concentration, in mg/l | | | | | |
|---|---|---|---|---|---|---|
| Sample | TS | TSS | $F^-$ | COD | T-Cr | BOD-5 |
| 4-21-80 samples | | | | | | |
| Comb. effl. | | 10 | 21 | | 0.56 | 59 |
| Neut. CWW | | 14 | | | | 95 |
| Clari. underflow | 24940 | 650 (VS) | 52 | | 6.4 | |
| Clari. effl. | 705 | 21 | 68 | 202 | 0.15 | |
| WAD | 180 | 6.3 | < 0.1 | 88 | 0.025 | 28 |
| CWW | 580 | 22 | 0.4 | 207 | | 32 |
| CAD | 15 | < 0.1 | 72 | 12 | 0.044 | |
| CCW | 1320 | 1.0 | 7.1 | 12 | | |
| Silicon solids | 1130 | 920 | 0.1 | 645 | | |

Meter vault — total phosphate, less than 0.01 mg/l as P
Comb. Effl. — chromium (VI), 0.11 mg/l

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035157

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

April 21, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800430

Subject: Laboratory analyses of wastewater samples.
Samples collected: April 14, 1980
Samples analyzed: April 14 & 15, 1980

| Analysis | 4-14-80 Comb | 4-14-80 CMW |
|---|---|---|
| BOD-5, mg/l | 42 | 107 |
| S. S., mg/l | 7.3 | 5.8 |
| Fluoride, mg/l | 2.8 | |
| Total chromium, mg/l | 0.03 | |
| Hexavalent Cr., mg/l | 0.02 | |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035158

aqua tech laboratories, inc.
LAB: 306 S.E. ASH PORTLAND, OREGON 97214
(503) 233-9871

April 17, 1980

Dirk Dunning
Wacker Siltronic
7200 N. W. Front Ave.
Portland, Oregon 97229

Laboratory Report No. 800414

Subject: Laboratory analyses of wastewater samples.
Samples collected: April 7 & 9, 1980
Samples analyzed: April 7 - 15, 1980

| Analysis | 4-7-80 CWW | 4-7-80 COMB | 4-7-80 BD | 4-9-80 COMB |
|---|---|---|---|---|
| BOD-5, mg/l | 68 | 56 | | 38 |
| S. S., mg/l | 68 | 160 | | 10 |
| Fluoride, mg/l | | 34 | | 11 |
| Total chromium, mg/l | | 0.12 | | 0.01 |
| Hexavalent Cr, mg/l | | < 0.01 | | 0.01 |
| Total phosphate, as P mg/l | | | 0.02 | |

Respectfully submitted,
AQUA-TECH LABORATORY, INC.

C. L. Chang

C. L. Chang, President



SCOEPA00035159

Technical Progress 1985

June 26, 1985

**Wacker Siltronic Corporation**
P.O. Box 03180
Portland, OR 97203
7200 N.W. Front Ave.
Portland, OR 97229
Phone (503) 243-2020
TWX 910-464-4777
FAX 503 226-0052

Renato Dulay
Department of Environmental Quality
Northwest Region
P. O. Box 1760
Portland, OR 97209

Subject: NPDES Permit Compliance Status
Permit No. 3847-J

3847-J

Dear Mr. Dulay:

The following is a technical progress report complete with data regarding Wacker Siltronic's interim and final NPDES effluent requirements. Please also regard this letter as a follow-up to our letters of June 10 and June 11 relating to this subject.

pH Control

We feel confident that we are now able to consistently achieve our pH compliance requirement of being out of compliance for less than 1% of the time. Since our change in meter reading location from the outfall to the waste treatment plant on April 25th, we have been able to achieve compliance. For the first 26 days this month we are 8.3 minutes out of compliance. Our near perfect record this month is attributed to our operator's efforts and an alarm system that signals the operator when the pH goes above 8.5 or below 6.5.

BOD

Our diversion of trenches in the Slicing and Plate Prep area into the organic waste water (OWW) system which discharges to the City's sewerage system has greatly reduced our BOD loading to the Willamette River. This resulted in diverting a 6-10 gpm flow stream containing approximately 100-140 lbs/day BOD loading to the city sewerage system. We have also initiated a control-at-the-source program by recently completing a drain survey. The drain survey is being used by Production personnel as a training aide to educate all employees as to the proper disposition of liquid wastes. This will help to minimize the discharge of unwanted organic wastes through the waste treatment plant.

A review of the attached BOD graphs shows that we are now able to achieve our interim and final limits of 15 mg/l BOD on a monthly average. Effectively operating our control-at-the-source program should allow us to achieve our final limits on a consistent basis.

SCOEPA00035160

TSS

Recent operational changes to our treatment system include increasing the alum feed concentration, changing the alum feed location and increasing the pH in the clarifer. These changes have increased the performance of our clarifier and resulted in our system being able to achieve our interim compliance level.

We are now reviewing possible methods of advanced treatment to consistently achieve our final limits of 15 mg/l. Progress on this will be forthcoming in our August 1, 1985 compliance status report.

I have also attached graphs showing our outfall BOD and TSS concentration on a monthly and weekly basis. Although we feel confident that we can achieve the final effluent concentration limits for BOD and TSS though programs discussed above, we have concerns regarding the proposed loading requirements based on a flow of 0.2 MGD as used in our permit for the final limits. We would be available to discuss this in detail at your convenience. In summary, I feel our company is showing excellent progress in achieving our October, 1986, effluent requirements.

Please call me at 240-2020, ext. 301, if you have any questions regarding this.

Sincerely,

WACKER SILTRONIC CORPORATION

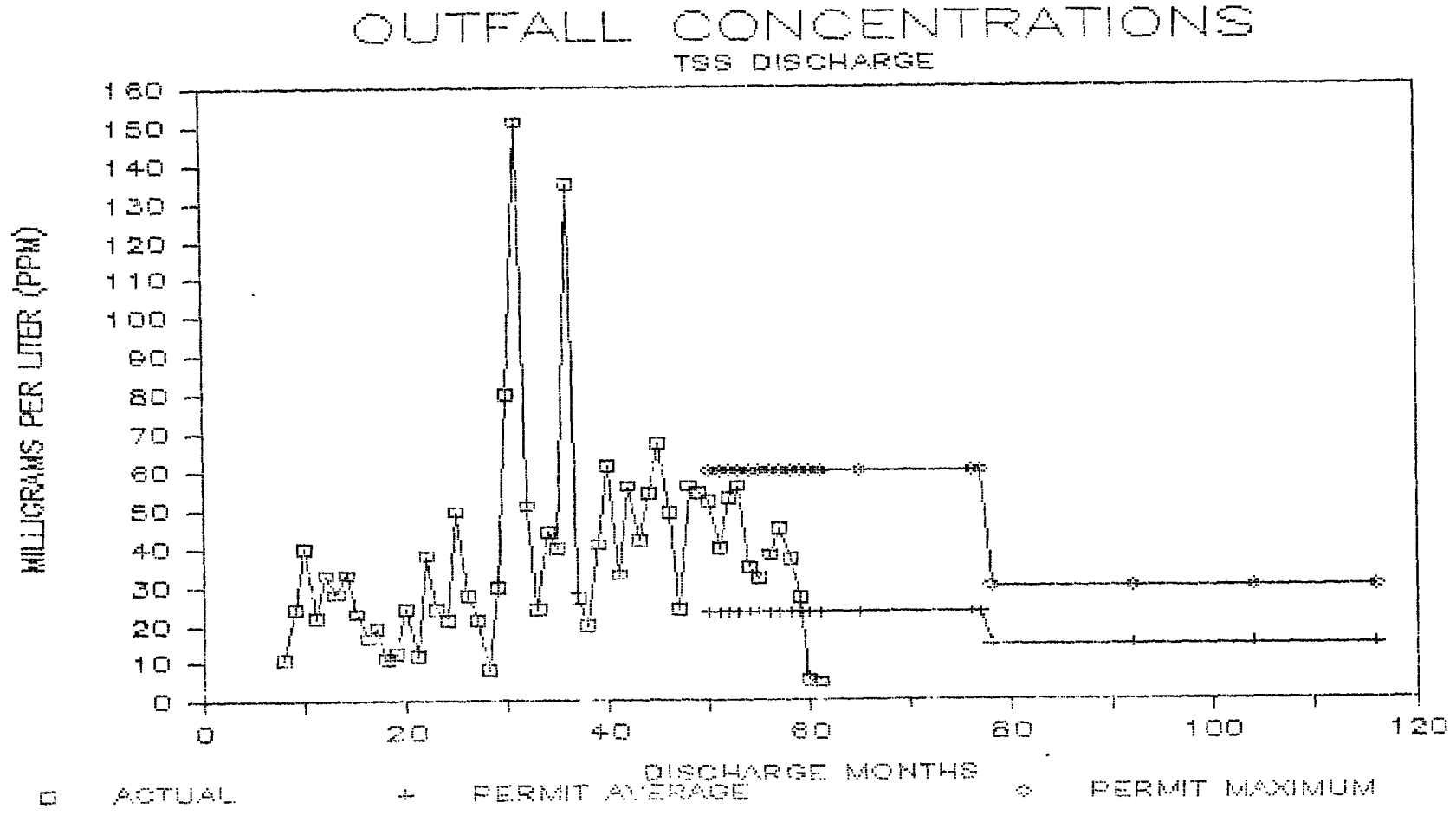
Murray M. Tilson, P.E.
Facilities Operations and
Environmental Supervisor

MMT:bw

Enclosure

cc: Greg Carr
Jim Ellis
Jim Harper
John Pittman
Mal Russ

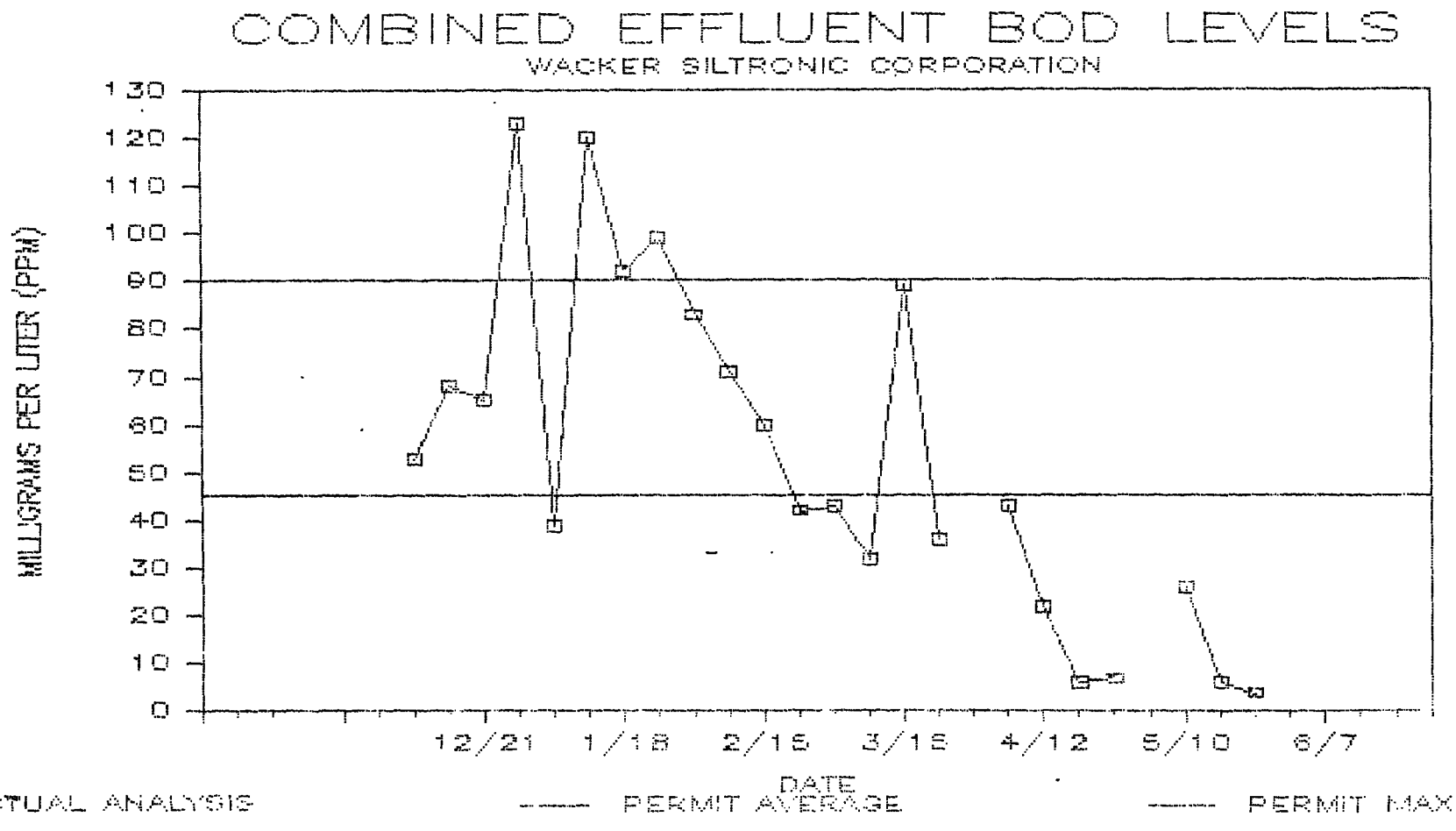
**WACKER SILTRONIC**






SCOEPA00035162

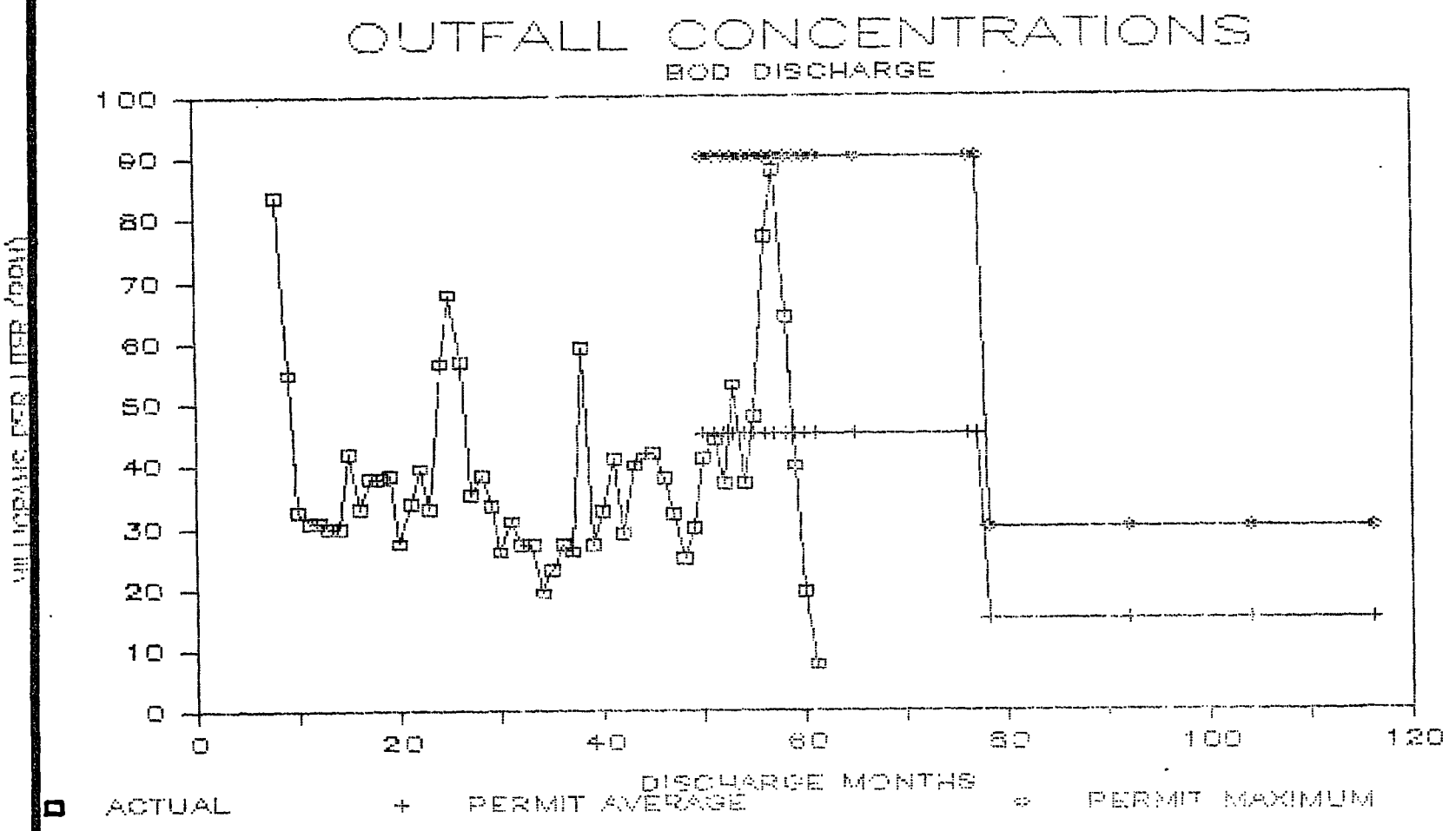
**WACKER SILTRONIC**




F-2

SCOEPA00035163

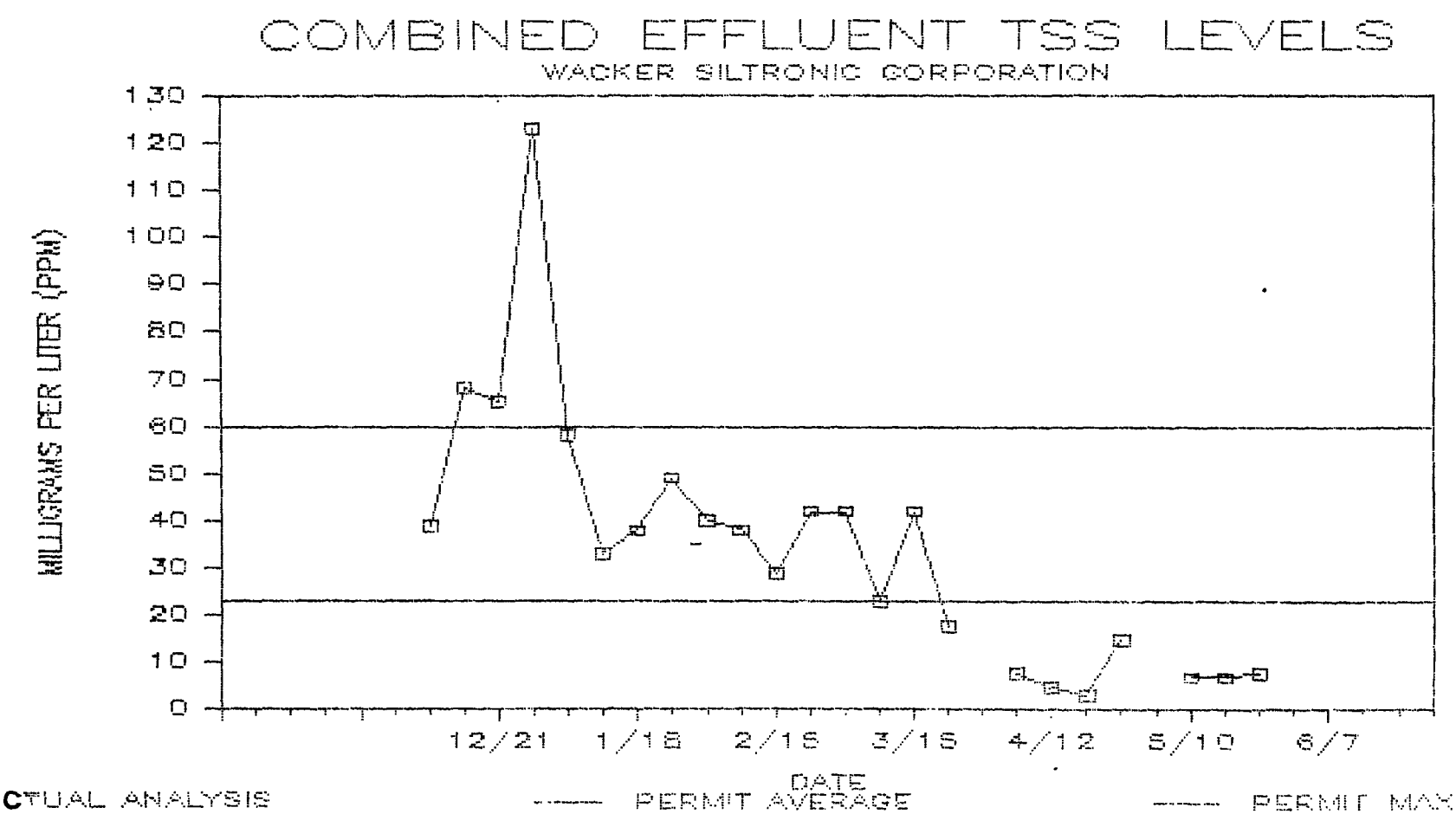
**WACKER SILTRONIC**




**F-3**

SCOEPA00035164

**WACKER SILTRONIC**




F-4

**Wacker Siltronic Corporation**
P.O. Box 03180
Portland, OR 97203
7200 N.W. Front Ave.
Portland, OR 97229
Phone (503) 243-2020
TWX 910-464-4777
FAX 503 226-0052

June 11, 1985

Mr. Renato C. Dulay
Field Representative
Northwest Region
Department of Environmental Quality
Post Office Box 1760
Portland, Oregon 97207

Dear Mr. Dulay:

Subject: Review Meeting of June 11, 1985

I am writing this letter to summarize today's meeting in which we reviewed the status of all outstanding environmental projects at Wacker Siltronic. I requested this meeting as I had just returned from a five week absence and felt a project update was in order.

The general subjects that were discussed are listed below along with the current status of the project:

NPDES Permit

- pH

  The current NPDES Permit required the point of continuous pH monitoring to be relocated from the discharge at the Wastewater Plant itself to the combined outfall near the Willamette River. A new pH meter was installed in October 1984 to comply with the permit, but the feedback for the control remained at the Wastewater Plant discharge.

  During late April, 1985, the installation was revised to provide feedback from the outfall. This revision has helped pH compliance significantly.

  Also, several minor streams from the facilities area were physically diverted from the outfall to the Wastewater Plant for neutralization, just in case some acidity or alkalinity entered the system.

  Action Plan

  pH was well in compliance for May 1985 and is in compliance so far in June. The plan is to continue with evaluation of previous actions.

. TSS

CH2M-Hill was contracted earlier in the year to study the clarifier and other operations so that changes in equipment or procedures could be recommended. Several operational procedure changes were implemented during March and in April which appear to have a beneficial result as TSS concentrations are now in compliance with current limits as well as October 1986 limits. During this evaluation period, however, production rates in the wafer plant have been low, which has contributed somewhat to the improvement.

CH2M-Hill has also run a trial on an ultrafilration system, which has demonstrated encouraging results as a polishing unit for the clarifier should such equipment be necessary.

Action Plan

Since current values for TSS are in compliance, we will continue collecting data to evaluate the future effect of increased production rates on TSS levels. Clarifier flows will be shown on future progress reports.

. BOD

On April 11, 1985, the slicing waste stream of 10 - 15 gpm was diverted to the City sewer in an attempt to decrease BOD levels in the river outfall. To date, it appears that this diversion was effective in reducing the BOD concentration to less than 10 ppm. It is our opinion that increases in production will not raise BOD concentrations as significantly as it will raise TSS levels.

Infrequent spikes in BOD are believed to be caused by waste disposal errors in the process areas. These errors will be corrected by a training program which is being initiated during July for re-training of existing employees and orientation training of new employees.

Drain labeling has been updated as well as the documentation which states chemical disposal by drain type. Other documentation which is required by the training program has also been updated.

Action Plan

We will continue collecting data to evaluate the future effect of more intensive training and increased production rates on BOD levels. We will also continue evaluation of technical solutions for further reduction of BOD.

- TTO

  This parameter is in compliance and projected to remain in compliance.

- Underground TCE Byproduct Tanks (Out-of-Service)

  The underground TCE Byproduct Tanks were taken out of service several years ago and then cleaned and filled with inert sand. It is Siltronic Management's position that these tanks should be excavated and removed from the plant site. In addition, we propose that a monitoring well be installed in the center of the area after tank removal. Because the tanks are located very close to the aboveground TCE storage tank containment basins and to the plant road, it is anticipated that shoring and partial demolition of the asphalt road will be necessary during the removal process. Repair of the road will have to be completed immediately after soil replacement. A monitoring well will allow for representative sampling of the groundwater at this point.

The above summary is an attempt to document today's conversation. Please call if you have questions or comments. A technical progress report with comprehensive data in regard to the above NPDES projects will be sent to you next week.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis
Acting Facilities Manager

JRE:jm

cc: Greg Carr, Jim Harper, John Pittman, Mal Russ, Murray Tilson, File

SCOEPA00035168

RECEIVED
ENGINEERING
MAR 5 1985

Wacker Siltronic Corporation
P.O. Box 03180
Portland, OR 97203
7200 N.W. Front Ave.
Portland, OR 97229
Phone (503) 243-2020
TWX 910-464-4777
FAX 503 226-0052

March 5, 1985

John L. Pittman
Wacker Siltronic

Mr. Renato C. Dulay
Department of Environmental Quality
Northwest Region
Post Office Box 1760
Portland, Oregon 97207

Dear Mr. Dulay:

Subject: TSS, BOD, and pH Status for N.P.D.E.S. Permit

This letter is provided as an update on the status of projects and operations regarding the subject permit.

First, as discussed in our meeting on Friday, March 1, an organization has been assembled by Siltronic to handle each of the current environmental concerns. Murray Tilson, who you met Friday, will coordinate all activities aimed at compliance with the existing N.P.D.E.S. Permit, especially in relation to TSS, BOD and pH. As part of this thrust, assignments have been made for controlling waste from the process source, primarily with the use of additional formal training and other informational programs. In addition, CH2M-Hill has been contracted to provide outside help in regard to possible technical solutions to the existing problems and Greg Carr is working with our Facilities Organization to develop data which, hopefully, will result in some process and flow changes. Information has been transmitted to Wacker Chemitronic in West Germany asking for help with process chemical changes, especially in regard to BOD reduction.

Specifically, the status of our program is as follows:

A. pH

Our records indicate that we have continually improved with pH compliance, but there are several remaining projects which will further enhance our performance. A capital project for $15,000 has been approved to divert floor drains in our Boiler Room and in our RO/DI Water Plant to a neutralization system which will eliminate intermittent disposal of weak alkaline/acidic materials. In addition, necessary instrumentation and wiring will be installed so that Wastewater Treatment Plant operators can remotely monitor and correct any slight variations in pH which can occur between the point of neutralization and the river outfall. Both of these projects will be completed by April 29.

B. BOD

Our approach to solving this problem involves the coordination of efforts from both the technical and administrative aspects. As mentioned earlier, an ongoing program is being developed to formally retrain our 835 existing employees about the proper use of drains and drain systems as well as providing them with background information regarding our Wastewater Treatment Plant and Solvent Recovery System. The program will be set up to give new employees the same training during their orientation period. This program is scheduled to be in place by May 17, 1985.

CH2M-Hill is currently evaluating the feasibility of possible technical solutions to the problem, such as, aerated lagoons, trickling filters, etc. These studies will be completed by June 1, 1985.

Greg Carr has actively been working on the feasibility of diverting selected streams to the city sewer. These diversions would reduce the BOD level, but to an unknown extent, and there are some problems which involve the handling of suspended solids in these streams. Because of these unknowns, Greg intends to propose to the City that we divert these streams on a temporary experimental basis to allow for a thorough evaluation. It is proposed to have the diversion completed by April 1, with a one (1) month evaluation period to follow. The feasibility of this project would then be known by May 17.

C. TSS

The stream diversion project discussed above would also have a positive effect on efforts to reduce TSS. Again, the magnitude of this reduction will remain unknown until the evaluation is complete.

CH2M-Hill is also evaluating the feasibility of using post-clarifier filtration for removal of 5-15 micron particles, but obviously the final plan for effective TSS removal is closely related to methods used for BOD reduction and will be established immediately after May 17.

Investigative work involving the waste from the planned Poly-Sitri Plant is also currently ongoing, but this work is being conducted on an independent basis.

Please call us with any questions or comments regarding the above.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis

James R. Ellis
Acting Facilities Manager

JE:jm

cc: Mal Russ
✓John Pittman
Murray Tilson
Greg Carr
File

# DEPARTMENT OF ENVIRONMENTAL QUALITY
## SOURCE INSPECTION FORM

☐ WQ
☐ SW
☐ AQ
☐ NC

COUNTY: MULTNOMAH

SOURCE NAME: WACKER SILTRONIC

SOURCE ADDRESS: 7200 N.W. FRONT AVE PORTLAND OREGON

OFFICIAL CONTACTED: GREG CARR

| TABLE A PARA | PREP TIME | TRANS TIME | INSPECTION TIME | PAPER TIME |
|---|---|---|---|---|
| | .5 | 1.3 | 6.5 | .2 |
| | | | | |
| | | | | |

| PERMIT NUMBER CO. | PERMIT NUMBER SOURCE | POINT | ACTION NO. | ACTION TYPE | DATE SCHEDULED MO. DAY YR. | DATE ACHIEVED MO. DAY YR. | RESULT | INSPEC. NO. |
|---|---|---|---|---|---|---|---|---|
| | 3847 J | | | 7 | | 10 05 84 | X | |

81 PERMIT MONITORING COMPLIANCE
82
83
84

**COMPLIANCE STATUS** *(RESULT CODE)*

| | IN COMP. | NOT IN COMPLIANCE | ON SCHEDULE |
|---|---|---|---|
| All permit conditions | Q | | |
| Permit emission limits | R | X | I |
| Emission standards | S | B | J |
| Performance reqts. | T | C | K |
| Monitoring & Reporting | U | D | L |
| Open burning limits | V | E | M |
| Procedural Reqts. | W | F | N |
| Fugitive emissions | X | G | O |
| Other | Y | H | P |

**TREATMENT/PROCESS EQUIPMENT — ADDITIONAL REMARKS — OPERATING CONDITIONS**

WASTEWATER TREATMENT PLANT IS OPERATING. pH CONTINUOUS METERING IS OPERATING pH = 6
PLANT IS NOT MEETING ITS SUSPENDED SOLIDS MONTHLY AVE FOR JUNE JUL & AUG
WACKER HAS A COMPLIANCE SCHEDULE TO EVALUATE OPTIONS TO ACHIEVED PERMIT LIMITS
RECEIVING STREAM - WILLAMETTE RIVER
~~SAMPLE RESULTS~~ REVIEWED LAB PROCEDURES & MONITORING WITH WACKER

SAMPLE RESULTS

Cr mg/l - 0.003
BOD mg/l - 46
TSS mg/l - 75
F mg/l 3.4
T Ha mg/l - .042
Cr+6 mg/l - <.002

SOURCES IN VIOLATION & LIMITS VIOLATED

[signature] 10-5-84
SIGNATURE OF INSPECTOR AND DATE

[signature] 10-5-84
SIGNATURE OF PERSON INTERVIEWED AND DATE

DEQ/RO-101 (4/80)

SOURCE COPY

SCOEPA00035172

## ACTION TYPE

01 NESHAPS Inspection - Point Source
02 NESHAPS Inspection - Demolition
03 NSPS Inspection
05 Verification of Equipment Operation For Tax Credit
06 Response to Complaint
07 Comprehensive Compliance Status Inspection
08 Informational Inspection
09 Perform Source Test
10 Follow-up On Violation
11 EPA Audit Inspection
12 Maintenance of Compliance Inspection
20 Issued Civil Penalty
21 Issued Notice of Violation
22 Issued 5 Day Warning Letter
23 Variance Requested By Company
30 Application Mailed to Company
51 NSPS Start Up
52 NSPS Source Test
53 NSPS Final Compliance
80 Submit Final Control Plans
81 Issue Purchase Orders for Control Equipment
82 Begin Construction of Control Equipment or Process Change
83 Complete Construction of Control Equipment or Process Change
84 Submit Source Test Results
85 Verify Compliance with Opacity Limits
86 Quarterly Report Due
87 113 Notice of Violation
88 113 Consent Order
89 113 Compliance Order
90 114 Request for Information
91 113 Consent Agreement
92 Report Due From Company

## POINT NUMBERS

**WOOD FIRED BOILERS**
010, 011, 012, 013, 014

**OIL OR GAS BOILERS**
020, 021

**INCINERATORS**
030

**WIGWAM WASTE BURNER**
035

**MATERIAL HANDLING CYCLONE**
070 THRU 099

**VENEER DRYER**
036, 037, 038, 039, 040

**PARTICLE DRYER**
041, 042, 043, 044, 045

**RAW MATERIAL STORAGE**
050

## TABLE A PARAGRAPH NUMBER

01 Seed Cleaning
02 Smoke House
03A Flour Mill – Large
03B Flour Mill – Small
04 Cereal Preparation
05A Prepared Flour – Large
05B Prepared Flour – Small
06A Animal Feeds – Large
06B Animal Feeds – Small
07 Beet Sugar Mfg.
08A Rendering Plant – Large
08B Rendering Plant – Small
09 Coffee Roasting
10A Sawmill – Large
10B Sawmill – Small
11 Hardwood Sawmill
12 Shake and Shingle Mill
13 Millwork
14A Plywood Mill – Large
14B Plywood Mill – Small
15 Veneer Mfg.
16 Wood Preserving
17 Particle board
18 Hardboard
19 Battery Separator Mfg.
20A Furniture – Large
20B Furniture – Small
21 Pulp and Paper Mills
22 Building Board Mills
23 Alkalies and Chlorine
24 Calcium Carbide Mfg.
25 Nitric Acid Mfg.
26 Ammonia Mfg.
27 Other Chemical Mfg.
28 Synthetic Resin Mfg.
29 Charcoal Mfg.
30 Herbicide Mfg.
31 Petroleum Refining
32 Asphalt Distillation
33 Asphalt Blowing
34A Asphalt Plant – Stationary
34B Asphalt Plant – Portable
35 Asphalts Felts and Coatings
36 Oil Re-Refining
37 Glass Mfg.
38 Cement Mfg.
39 Ready Mix Concrete
40 Lime Mfg.
41 Gypsum Products
42A Rock Crusher – Stationary
42B Rock Crusher – Portable
43 Steel Mill
44A Incinerator – Large
44B Incinerator – Small
45A Foundry – Large
45B Foundry – Small
46 Primary Aluminum
47 Zirconium or Hafnium
48A Primary Metals – Large
48B Primary Metals – Small
49 Secondary Smelting of Metals
50 Non-Ferrous Metals Foundry
51 Electroplating
52 Galvanizing
53 Battery Mfg.
54A Storage Elevator – Large
54B Storage Elevator – Small
55A Power Generation – Large
55B Power Generation – Small
56 Gas Production
57A Terminal Elevator – Large
57B Terminal Elevator – Small
58A Boiler, in AQMA – Large
58B Boiler, in AQMA – Medium
58C Boiler, in AQMA – Small
59A Boiler, D.O., in AQMA – Large
59B Boiler, D.O., in AQMA – Medium
60 Boiler – Outside AQMA
61A New Source – 10 Tpy or more – Small
61B New Source – 10 Tpy or more – Medium
61C New Source – 10 Tpy or more – Large
62A Odor Source – Small
62B Odor Source – Medium
62C Odor Source – Large
63A Air Quality Problem Source – Small
63B Air Quality Problem Source – Medium
63C Air Quality Problem Source – Large

SCOEPA00035173

WACKER

# VENDOR CONTACT REPORT

p Elmer
Greg Carr

DATE 10/1/84
VENDOR DEQ labs
REPRESENTATIVE Ron McCartney - Inorganics Supervisor
PHONE 229-5983
WACKER REPRESENTATIVE Judy Duncan
SUBJECT Requirements for Cr detection and procedures the use for analysis of Cr VI & total Cr.

- Whether or not you must analyze by the procedure which is appropriate for the level of Cr in your waste stream vs. what your actual max. Cr discharge limit is depends on the actual permit. It depends on whether they want an actual quantity for effect on aquatic life. Check w/ Renato on this. Depends on where water is going what they want it analyzed to. (See VCR for Renato contact)
- for Cr VI they are using a lead sulfate precipitation using 10 ml graduated tubes w/ teflon lined stoppers suck away liquid on top w/ a pasteur pipette. It gets rid of all the other materials. Then analysis by graphite furnace. (It is better than Kelation looking at 0-40 ug/l) They use 10 ml of sample. Can be adapted. He will send a SOP of EPA procedure they use.
- Total Cr is by direct aspiration (nitrous oxide flame) or graphite furnace after digestion with $HNO_3$ in EPA manual.
- Concerning coming to see his procedures in their lab - would be difficult - since he never knows when samples will come in - and analyze ASAP.

SCOEPA00035174

74-78

EPA manual is not clear - refers to other sections.

4.13 - total metals procedures

When it gets to .5% v/v for instr manuf. to keep in soln.

They don't take it to dryness as it says - almost dryness.

Digest & reflux.

Evap 50 to 20 ml.

add a total of 5 ml.

bring back up to 50 ml

so about 5%

Std. Methods

has to be digested for a total Cr.

They combined EPA + Std methods to come up w/ their method.

WACKER

# VENDOR CONTACT REPORT

@ Elinor Greg Carr

DATE 10/1/84

VENDOR DEQ

REPRESENTATIVE

PHONE

WACKER REPRESENTATIVE

SUBJECT Detection limit required for our waste streams on Cr VI & Cr total

My question was if we can choose a procedure based on our contract ave. limit or if we must analyze the waste streams to give the actual amount in our waste streams.

Renato said they want the amount in our actual waste stream. It is not sufficient to test just to the ave. mix one reason is that sometimes we may actually exceed the permit & will want the other readings to average it with. They want actual quantities of Cr VI. Select a procedure which is good for area of our usual results. They decide on a case by case basis whether our procedure is acceptable or not. For Cr VI ave allowable .02 mg/l: detection limit of .003, as we had <.003 for July is OK. For Total Cr .3 ave allowable ~~is~~ ; <.003 µg/l is acceptable detection limit

For Total Toxic Organics 1.372 ppm max allowable so <1.001 ppm detection limit is acceptable

~~For~~ For Phosphates 2.0 mg/l ave max ~~is~~ ; <.01 detection limit is acceptable.

SCOEPA00035176

**Wacker Siltronic Corporation**
P.O. Box 03180
Portland, OR 97203
7200 N.W. Front Ave.
Portland, OR 97229
Phone (503) 243-2020
TWX 910-464-4777
FAX 503 226-0052

Gregory E. Carr
September 24,1984

Renato Dulay
Oregon DEQ
Northwest Region
PO Box 1760
Portland, Or, 97207

Mr Dulay:

According to our NPDES permit Wacker Siltronic Corporation was supposed to submit a master plan for the compliance schedule for meeting the 1986 TSS and BOD limitations as stated in our permit by August 1, 1984. Due to the press of activities this report was overlooked. The report will be submitted to your office on October 5, 1984 or before.

Sincerely Yours,

Gregory E. Carr
Facilities Engineer

Wacker Siltronic Corporation
P.O. Box 03180
Portland, OR 97203
7200 N.W. Front Ave.
Portland, OR 97229
Phone (503) 243-2020
TWX 910-464-4777
FAX 503 226-0052

June 4, 1984

Chuck Clinton
Oregon DEQ
Northwest Region
PO Box 1760
Portland, Oregon 97207

Mr. Clinton:

This letter details the events of a small spill of chromic acid that occured here on May 28. A total of roughly 3.7 pounds of neutralized chromic acid was discharged over a period of 11 hours or so, with an average chromium (hexavalent) concentration of 1.2 ppm at the outfall. This was diluted by a total water flow of 250,000 gallons of normal discharge water.

On Friday May 25, the small inside waste chromic acid storage tank was pumped out to the outside storage tank until empty. This was in anticipation of the long weekend. Due to an as-yet unknown reason the inside storage tank filled up with water over the long weekend, even though no one operated the equipment during this period of time. The pump control malfunctioned, probably due to crystals jamming the control float. When the operators returned to work on May 28 at noon they found the equipment full of liquid, with some on the floor in a containment area. During the clean-up procedure some acid entered a floor drain. From there it went to the Waste Water Treatment Plant (WWTP), and after neutralization it flowed to the Willamette River outfall diluted with our normal discharge flow.

The cleanup in the acid etch area occured at about 13:00 on May 28. There was no notification given the WWTP operator. The spill was not discovered at the WWTP until 19:00. At that time the contaminated water flow (WAD system) was shut off and allowed to accumulate in a storage tank until the exact status of the problem could be determined. At about 23:00 it was determined that the worst of the spill had already passed through to the river and normal flows were resumed. The chromium-containing wastewater thus entered the river from approximately 14:00 until it had all been flushed out, which would have been about 02:00 on May 29. In total about 3.7 lbs of chromium were discharged, of which 75% was hexavalent (chrome 6+) and the rest trivalent. The peak measured hexavalent chromium (sampled at the WAD neutralization tank) was 3.0 ppm, with a total chromium of 4.4 ppm. This would amount to a hexavalent chromium concentration of 1.6 ppm at the outfall. During this period of time about 250,000 gallons of normal water were discharged.

As a result of this occurence some immediate operational changes have been made, and operational and mechanical changes will be made when a complete plan is developed. Immediate changes have been:

1) The WWTP operator must be notified immediately upon discovery of a chromic acid spill, even if contained.

2) A clarification of the clean-up procedure has been issued.

3) Manual checks of the waste pump controls will be done before any operations involving chromic acid are done.

4) The entire etch area will be locked up during off-hours to prevent any unauthorized operations.

Other long-term system modifications and operational changes will be made as soon as we develop a plan that addresses all the possible problems. Your comments as a part of this process will be welcomed if you would like to participate.

Thank you very much. If you have any questions covering this matter please call.

Sincerely,

WACKER SILTRONIC CORPORATION

Greg Carr
Facilities Engineer

GC/kk

cc: J. Catanoso
D. Crane
T. D'Silva
G. Pendleton
D. Stalder
R. Waney
File

January 5, 1984

Oregon DEQ
Northwest Region
PO Box 1760
Portland, Oregon 97207

Attention: Chuck Clinton

Mr. Clinton:

As you know we had a spill of TCE (Trichloroethylene) in one of our processing areas on 12/21/83 sometime between 7 and 8 p.m. The incident occurred as follows:

There was a special holiday dinner for all swingshift employees from 7 p.m. to 8 p.m. Upon returning to the work area at about 8 p.m. the employees found a degreaser bath overflowing with TCE onto the floor. The TCE flow was immediately stopped. The operating areas were evacuated because of the fumes, and mechanics began to clean up the spill wearing Scott Air Packs. I was called into the plant and arrived approximately 9:30 p.m. It appeared some TCE had run into a floor trench that eventually, after neutralization and clarification, discharges through our Willamatte River outfall (see illustration). I immediately pulled samples from the floor trench, the SWW (Silicon Waste Water) forwarding sump, the Flash Mix tank and the clarifier outfall. There was a slight odor of TCE in the samples from the SWW Forwarding Sump and the Flash Mix Tank, but no free TCE. Based on the odor I estimated there was 40 ppm TCE in these flows at that time, but chemical analysis was not run. From this I estimate that the total amount of TCE that entered the floor trench was 10 to 20 gallons. The only other source for estimating the quantity of TCE spilled into the trench is the tank inventory sheets. Due to TCE consumption in other parts of the plant these sheets are not all that accurate. From the sheets the spill could have ranged from nothing to 120 gallons.

Because of the room construction most of the spilled TCE remained on the floor. Roughly 20 gallons of TCE was vacuumed up and disposed of into an in-plant waste solvent drain. The majority of the spill, about 300 gallons, was allowed to evaporate with help from ventilating fans placed to blow the fumes outside the building. No granular adsorbent was used as this would have introduced unacceptable quantities of dirt into a clean processing area.

To prevent a similar incident from recurring we are planning to install overflow lines on the degreaser baths that do not already have them. These will divert any excess liquid from the baths to the waste solvent drain system.

On Wednesday night 12/21 and on Monday night 12/26 we had minor spills of Chromic acid into the wastewater system. These incidents occurred as follows: By Wednesday 12/21 the pump-out line from the inside waste Chromic Acid tank to the outside storage tank had frozen due to the extremely cold weather. The inside tank filled up and about 20 gallons of dilute chromic waste ran out on the floor. This waste sat on top of a drain that had been previously plugged to prevent such spills from entering the waste water system. Evidently the plug leaked, allowing about 10 gallons of waste containing 1.5 lbs chromic acid to enter the waste system over a 14 hour period. On 12/22 when the spill was discovered the remainder of the spilled waste was cleaned up and the inside storage tank was pumped into plastic barrels for temporary storage.

The chromium spill was first noticed by the operator at the WWTP (Waste Water Treatment Plant). The flow of the wastewater stream was diverted to the municipal sewer since they have a chromium limitation of 5.0 ppm. The water was analyzed and found to have 1.48 ppm chromium. The decision was made to resume normal operation by redirecting the waste water flow to the river.

Over the long weekend the inside storage tank again filled up, probably due to a slow leak of rinse water (it only holds 60 gallons). The contamination was discovered by the WWTP operator on 12/27 and the flow was diverted to the municipal sewer. The water was analyzed and found to have 2.02 ppm chromium. It was diverted to the sewer for 4 hours and then allowed to discharge to the river.

All in all, the chromium-contaminated wastewater discharges were as follows:

| | | | | |
|---|---|---|---|---|
| 12/21 - 12/22 | 294,000 gallons | 14 hrs. | 1.5 lbs Cr | 1.5 ppm |
| 12/26 - 12/27 | 210,000 gallons | 10 hrs. | 10. lbs Cr | 2.0 ppm |

Our NPDES limitations are a maximum of 1.0 ppm Cr for a 24 hr. average, with a daily maximum of 1.1 lbs Cr per day.

To prevent this from recurring we will do the following:

1) On 12/27 the floor drain plug was heat-sealed in place to absolutely assure no leakage into the waste water system.

2) The waste chromic line will be properly heat-traced and insulated.

Sincerely, Greg Carr

WACKER SILTRONIC CORPORATION

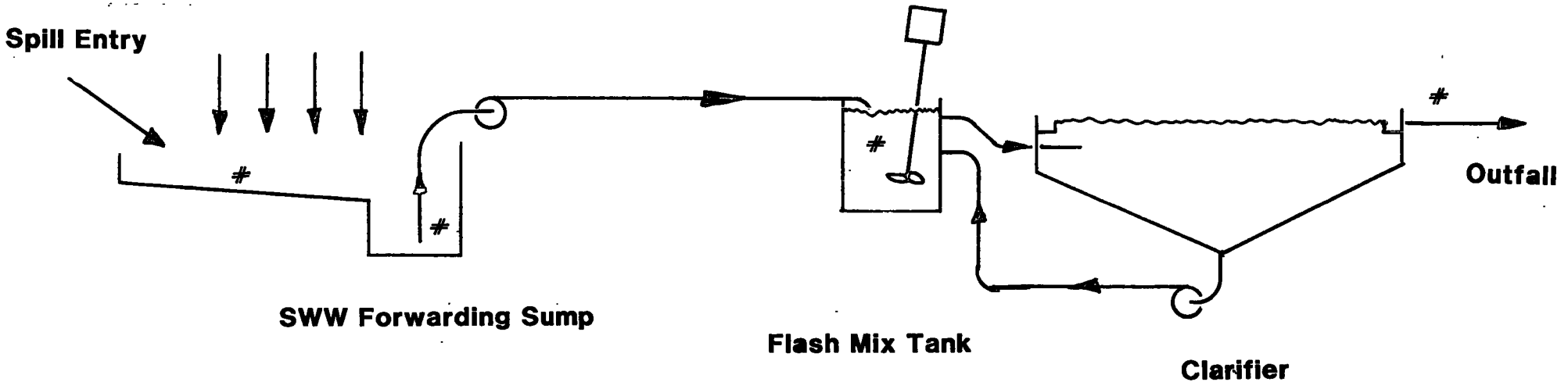
Greg Carr

GC/kk

# SWW TREATMENT SYSTEM

12 / 22 / 83

# Sampled Points




SCOEPA00035182

TCE Spill 12/22/83

Started after dinner @ 7PM
Operators caught spill @ 8PM returning from dinner
Degreaser ran over onto floor.
Some went into SWW Trench.
Some stayed in room & was cleaned up.
Some went into SOD-W tank.

~10PM
Sampled SWW, top & bottom. No TCE smell, no TCE visible as a 2nd phase.
Sampled Flash mix tank. Slight smell (~20 ~~50~~ ppm), no visible amount of 2nd phase.
Sampled Clarifier outfall. No TCE smell, no 2nd phase.
Operator had also sampled Flash Mix tank @ ~9PM.
Degreasing Tank 140 gallons capacity.

| Tank Readings | | | | | |
|---|---|---|---|---|---|
| @1600 | Fresh TCE 53" | SODW 64" | SODR 48" | ± ½" |
| @0000 | Fresh TCE 49" | SODW 66" | SODR 49" | ± ½" |

~~Fresh~~ TCE calibration is 106.3 gal TCE/inch
Δ SODW 2" ± ½" this amounts to 108 gallons ± 27 gallons
Δ SOD R 1" ± ½" this amounts to 30 gallons ± 15 gallons
Δ Fresh TCE 4" ± ½" this amounts to 425 gallons ± 60 gallons
Picked up by vacuum ~ 20 gallons
Amount evaporated
Room is 47'x40'. About ¼ was covered 1" deep. This amounts to 290 gallons ± 100 gallons.

| Total Accounting | Worst Case | Best Case | Average |
|---|---|---|---|
| Fresh TCE | 485 | 365 | 425 |
| SOD-W | - 140 ("Degreaser Capacity") | - 140 | - 140 |
| SOD-R | - 15 | - 45 | - 30 |
| Evaporated | - 190 | - 390 | - 290 |
| Picked-up | - 20 | - 20 | - 20 |
| | + 120 gallons | - 225 | - 25 gallons |

SCOEPA00035183

| | 12/21 | Fresh | SOD-W | SOD-R |
|---|---|---|---|---|
| 1200 | 53 | | 64 | 48 |
| 1600 | 53 | | 64 | 48 |
| 2000 | 50 | Δ 4" ± 1" | 64 | Δ 2" ± 1" | 48 | Δ 1" ± 1" |
| 0000 | 49 | | 66 | 49 |

Calibration is 106.3 gallons TCE/inch gauge.

106.3 x 3 = 319 gallons TCE Total

(53-49) x 106.3 = 425.2 gallons TCE (Fresh) used ± 108 gallons

SOD-W = 119" ϕ = 59.5

SOD-R = 95" ϕ 47.5

SOD-W

66 ÷ 1.49 + 1 = 45.9 / 119 = .386

64 ÷ 1.49 + 1 = 44.5 / 119 = .374

$$\text{Area}_1 = \frac{\pi 59.5^2}{360} \cos^{-1}\left(\frac{59.5-45.5}{59.5}\right) - (59.5-45.5)\sqrt{2(59.5)(45.5) - 45.5^2}$$

$$= 1584.5 \text{ in}^2$$

$$\text{Area}_2 = \frac{\pi}{360} 59.5^2 \cos^{-1}\left(\frac{59.5-44.5}{59.5}\right) - (59.5-44.5)\sqrt{2(59.5)(44.5) - 44.5^2}$$

$$= 1465.7 \text{ in}^2$$

$$\Delta = \frac{118.8 \text{ in}^2}{144 \text{ in}^2/\text{ft}} \times 17.5' = 14.4 \text{ ft}^3 = 108 \text{ gallons} \pm 54 \text{ gallons}$$

SOD-R

49 ÷ 1.47 + 1 = 34.3"

48 ÷ 1.47 + 1 = 33.7"

$$\text{Area}_1 = \frac{\pi}{360}(47.5)^2 \cos^{-1}\left(\frac{47.5-34.3}{47.5}\right) - (47.5-34.3)\sqrt{2(47.5)(34.3) - 34.3^2}$$

$$= 852.8 \text{ in}^2$$

$$\text{Area}_2 = \frac{\pi}{360}(47.5)^2 \cos^{-1}\left(\frac{47.5-33.7}{47.5}\right) - (47.5-33.7)\sqrt{2(47.5)(33.7) - 33.7^2}$$

$$= 812.3 \text{ in}^2$$

$$\Delta = \frac{39.8 \text{ in}^2}{144} \times 14' = 28.9 \text{ gallons} \pm 29 \text{ gallons}$$

By inventory

| | | | |
|---|---|---|---|
| Loss in ~~Fresh~~ TCE | 425.2 gallons ± | = | 268 gallons |
| - Gain in SOD-W | 108 gallons ± | ± | 180 gallons |
| - Gain in SOD-R | 29 gallons ± | | |
| - Picked up by vacuum | 20 gallons ± | | |

Amount evaporated ~~30 to 50~~ gallons

room = 47'x40'

roughly ¼ covered 1" deep = 39 ft$^3$

= 290 gallons

SCOEPA00035185

# W.W.T.P. EXCEPTION REPORT

NPDES Maximums

SEPTEMBER 1983

| Standards | Date/Time | Violation | Reason for Occurance |
|---|---|---|---|
| Combined pH 6.0-9.0<br>OWW pH 5.5-10.0 | 9-6-83<br>07:20\|07:30 | Hi Clarifier PH. 10.8 | Switched from Taylor to Computer. Computer worked in reverse. Added lime instead of acid. |
| TSS 30 ppm<br>BOD 30 ppm | 9-6-83<br>09:45\|11:40 | Hi\|Low Clarifier PH. 11.0\|1.8 | Computer cannot handle regeneration. |
| Hexa Cromium .05 ppm<br>Total Cromium 1.0 ppm | 9-6-83<br>12:30\|13:10<br>14:00\|14:25 | Hi Clarifier PH. 10.0 | Computer again had problems with second regeneration. |
| Fluoride 20 ppm<br>Phosphate 5 ppm | 9-7-83<br>8:15\|9:15<br>10:15\|11:00 | Hi Clarifier PH. | Lime lines being worked on. Wasting strong C.C.W. Acid Pumps having slow effect. Computer sluggish. |
| | 9-19-83<br>19:55\|20:15<br>07:20\|04:10 | Hi Clarifier PH. | Computer bouncing back & forth. Having problems stabilizing. |

J.—,

We're getting better!

SCOEPA00035186

# W.W.T.P. EXCEPTION REPORT

NPDES Maximums

SEPTEMBER 1983

| Standards | | Date/Time | Violation | Reason for Occurance |
|---|---|---|---|---|
| Combined pH 6.0-9.0<br>OWW pH 5.5-10.0 | Jeff | 9-6-83 07:20\07:30 | Hi Clarifier pH. 10.8 | Switched from Taylor to Computer. Computer worked in reverse. Added lime instead of acid. |
| TSS 30 ppm | | 9-6-83 09:45\11:40 | Hi\Low Clarifier pH. 11.0\1.0 | Computer cannot handle regeneration. |
| BOD 30 ppm | | 9-6-83 12:30\13:10 14:00\14:25 | Hi Clarifier pH. 10.0 | Computer again had problems with second regeneration. |
| Hexa Cromium .05 ppm<br>Total Cromium 1.0 ppm | Oliver | 9-7-83 8:15\9:15 10:15\11:00 | Hi Clarifier pH. | Lime lines being worked on. Wasting strong C.C.W. Acid pumps having slow effect. Computer sluggish. |
| Fluoride 20 ppm | | | | |
| Phosphate 5 ppm | Ron | 9-19-83 19:55\20:15 03:20\04:10 | Hi Clarifier pH. | Computer bouncing back & forth. Having problems stabilizing. |

J.m.

We're getting better!

[signature]

SCOEPA00035187

# W.W.T.P. EXCEPTION REPORT

NPDES Maximums

| Standards | Date/Time | Violation | Reason for Occurance |
|---|---|---|---|
| Combined pH (7) 6.0-9.0<br>OWW pH 5.5-10.0 | 8-23-83 ~~08:35-08:45~~ | Hi C.E. Ph 10.0 | R.S.P. on computer not working |
| | 8-23-83 09:35-09:45 | Lo C.E. Ph 3.4 | Regeneration & bad "want" Lime value |
| TSS 30 ppm<br>BOD (8) 30 ppm | 8/30/83 1500 to 1600 | Hi CE P.h. | heavy lime consistancy + failure of Lime hoppes as a whole., re work on Lime auger, it was cleaned out + adjusted, also lime powder fell through into slurry. |
| Hexa Cromium .05 ppm<br>Total Cromium 1.0 ppm | 8/30/83 1630 to 1710 | — High CE P.h | standby acid pp' cut out, solution too strong ~~mixing~~ with clarifier, c/t std'by acid pp' CE P.h. came down |
| Fluoride 20 ppm | 8-31-83 07:10-07:35 | Hi "bww" Ph 10.8 | ccwww TO "owwT" |
| Phosphate 5 ppm | | | |

SCOEPA00035188

# W.W.T.P. EXCEPTION REPORT

NPDES Maximums

| Standards | Date/Time | Violation | Reason for Occurance |
|---|---|---|---|
| Combined pH 6.0-9.0 | 8.9.83 0045 | LO CE PH 5.6 | LAYERING IN THE CLARIFIER |
| OWW pH 5.5-10.0 (1) | " 0125 | Hi CE PH | High CLARIFIER PH |
| | " 0240-0400 | " " " | " " " |
| | " 0415-0515 | " " " | " " " |
| | 8.9.83 0530-0600 | " " " | " " " |
| TSS 30 ppm BOD 30 ppm | 8-9-83 11:50-12:35 | Hi "OWW" Ph 11.0 | TRIED using 1 acid pump while wasting CCW |
| (2) | 8-11-83 0300-0330 | Hi C.E. PH 10.0 | Acid pump didn't kick in until PH got up to a 10.0 |
| Hexa Cromium .05 ppm Total Cromium 1.0 ppm | 8-12-83 0020-0115 | Hi OWW PH 10.2 | Wasting CCW and forgot to turn on stand by acid pump. |
| (3) | 8-12-83 0250-0310 | Hi C.E. P.H 10.6 | Something hot coming then have stand by pump on |
| Fluoride 20 ppm | 8-12-83 08:25-08:55 | Hi C.E. Ph 11.4 | CCWW STORAGE TANK OVERFLOWED |
| Phosphate 5 ppm (4) | 8-12-83 09:25-09:55 | LO C.E. Ph 3.2 | DUE TO REGENERATION |
| | 8-12-83 10:10-10:20 | Hi C.E. Ph 11.0 | (") |
| | 8-12-83 14:20-14:50 | Hi "OWW" Ph 10.5 | TCE STRIPPER ON LINE |
| | 8.13.83 0000-0045 | " " " 10.5 | " " " " |
| (5) | 8-15-83 0935-0942 | Lo C.E. Ph 4.1 | Due To Regeneration |
| | 8-16-83 0030-0105 | Hi OWW Ph 10.2 | REASON UNKNOWN. |
| | 8-16-83 0247-0258 | Hi C.E. Ph 9.5 | " " " |
| (6) | 8-16-83 0414-0428 | Hi C.E. Ph 10.0 | " " " |
| | 8-18-83 18:10-18:30 | Hi "OWW" Ph 11.4 | "OWW" SYSTEM IS PUT BACK ON LINE, & IT WAS SHOCKED |

"CANT" Ph probe FAILED

SCOEPA00035189

# W.W.T.P. EXCEPTION REPORT

NPDES Maximums

| Standards | Date/Time | Violation | Reason for Occurance |
|---|---|---|---|
| Combined pH * 6.0-9.0 OWW pH 5.5-10.0 | 7.29.83 0110-0120 | CE Hi-Ph | WAD CONTROLER MALFUNCTION |
| | ↓ 0330-0400 | ↓ | " " " |
| * | 7-29 0630-715 | CE Hi-ph | " " " |
| TSS 30 ppm BOD 30 ppm ** | 7-29-83 16:05-16:45 | Hi "oww" Ph 10.5 | To much ccww To "oww" |
| Hexa Cromium .05 ppm Total Cromium 1.0 ppm | 8-1-83 20:00-20:50 | Hi "oww" Ph 10.3 | ? |
| | 8-2-83 10:20-10:50 | Hi C.E. Ph 9.3 | DUE TO DEGENERATION |
| Fluoride 20 ppm | 8-2-83 20:20-21:05 | Hi "oww" Ph 10.7 | TCE STRIPPER ON LINE/P ONLY 1 H2SO4 pump on To "oww" |
| Phosphate 5 ppm | 8-3-83 0900- | Hi oww PH 10.3 + up | Torque turned down on back up acid pump. |
| | 7-29-83 24hr. Composite | High BOD 34mg/L High TSS 71mg/L | Lime system failed to control clarifier pH |
| | 8-5-83 04:10/05:00 | Hi C.E. Ph 10.6 | Possible clarifier Ph Level? OR R.S.P. on computer not functioning |
| | 8-5-83 2200-2245 | Hi oww Ph | unknown as to what raised ph!, 2 acid pps on, time passed until they were able to pull P.h. down. |

SCOEPA00035190

# W.W.T.P. EXCEPTION REPORT

NPDES Maximums

| Standards | | Date/Time | | Violation | Reason for Occurance |
|---|---|---|---|---|---|
| Combined pH 6.0-9.0 | * | 7-14-83 | 03:05/03:30 | Hi & Low C.E. Ph 2.0-9.2 | Hi CLARIFIER Ph → INST. DEPT. WOULD NOT COME OUT TO Repair Ph Probe |
| OWW pH 5.5-10.0 | * | 7-14-83 | 03:35/05:00 | Hi & Low C.E. Ph 2.2 — 10.16 | |
| TSS 30 ppm | * | 7.14.83 | 0815-0830 | Hi C.E. Ph 9.2 | High clarifier Ph + Faulty Ph probe FLASH-MIX |
| BOD 30 ppm | * | 7.14.83 | 0850-0920 | LO-CE PH 3.15 | HIGH CLARIFIER PH |
| Hexa Cromium .05 ppm | * | 7.14.83 | 1145-1200 | LO-CE PH 2.15 | HIGH CLARIFIER PH |
| Total Cromium 1.0 ppm | | | 0945-1030 | Hi CE PH | |
| | | 7-15-83 | 0145-0200 | Low CE Ph (5.7) | |
| Fluoride 20 ppm | | 7-15-83 | 24hr. composite | High BOD 32mg/L<br>High TSS 82mg/L | due to Lime hopper inability to deliver proper Lime to slurry, resulting in low CANT Ph, which causes low clarifier Ph, which causes low C.E. Ph., R.S.P. mode slow to counter Low Ph. |
| Phosphate 5 ppm | * | 7-19-83 | 1220-1308 | Hi Ph. CE. 9-12.8 @ | CCW over FLOW |
| | * | 7-21-83 | 0615-0715 | Hi Ph C.E. @ | "B" bed rinse. B/W. acid pump failure |
| | * | 7-21-83 | 1305-1355 | OWW hi Ph @ | stripper on Line. |
| | ** | 7-22-83 | 1020-1040 | Low CE pH | Regeneration |
| | * | 7-26-83 | 0600-0630 | High Ph on OWNT | something not coming from the Plant |
| | ** | 7.26-83 | 2010-2130 | Hi Ph OWNT | WASTING CCW DUE TO HI CCW STORAGE TK. LEVEL |

* Could have been held to min. if independant acid pump was available.

SCOEPA00035191

# W.W.T.P. EXCEPTION REPORT

NPDES Maximums

| Standards | | Date/Time | | Violation | Reason for Occurance |
|---|---|---|---|---|---|
| Combined pH 6.0-9.0 | * | 7-1-83 | | High Combined PH | Calibration & readjustment of pH probes. |
| OWW pH 5.5-10.0 | ** | 7-2-83 | 0145-0210 | High OWW PH | Passing from flushing the Polishing System. |
| | * | 7-4-83 | 2330-0035 | High Combined PH 9.0-10.0 | Switched from Taylor Controls to Computer. |
| TSS 30 ppm | * | 7-6-83 | 1015-1025 | Hi Comb. PH | Regeneration |
| BOD 30 ppm | * | 7-7-83 | 1230-1240 | Hi Comb PH | ? |
| | * | 7-8-83 | 1310-1330 | Hi Ph on Comb med 9.4 | Regeneration |
| Hexa Cromium .05 ppm | * | 7-12-83 | 0900-0907 | Hi COMB Ph 9.7 | Regeneration, plus Process bldg. Dump |
| Total Cromium 1.0 ppm | ** | 7-12-83 | 18:50/19:10 | Hi "OWW" Ph 10.4 | From The TCE Stripper |
| Fluoride 20 ppm | ** | 7-12-83 | 20:15/20:45 | Hi "OWW" Ph 10.4 | From TCE Stripper |
| Phosphate 5 ppm | ** | 7-13-83 | 00:35/03:15 | Hi "OWW" Ph 11.2 | Out of $H_2SO_4$ |
| | * | 7-13-83 | 03:50/05:50 | Hi C.E. Ph 12.0 | Ran out of Sulfric Acid |
| * Must be out of spec for * at least 5 minutes. * Don't list short spikes. | * | 7-13-83 | 23:00/25:50 | Hi C.E. Ph 10.6 | Clarifier has a 10.8 Ph & The "WAD" $H_2SO_4$ pump Failed on RSP! |
| | * | 7-14-83 | 00:15/03:00 | Low C.E. Ph 4.0 | Clarifier still The same, hard to stablize C.E. Ph |

SCOEPA00035192

WACKER

# WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

August 11, 1983

Chuck Clinton
DEQ Northwest Region
P.O. Box 1760
Portland, Oregon 97207

Mr. Clinton:

As reported by my telephone call to Mr. Tom Bispham on August 4, 1983 we had an uncontrolled release of a diluted Nitric/Hydrofluoric acid mixture to the Willamette River on August 3 and August 4. About 45 gallons of a 65% acid mixture was flushed to the river along with our normal outfall flow of about 120,000 gallons of water over a 6 to 8 hour period. No obvious effects were observed at the outfall.

The sequence of events was as follows:

The level controls on the strong acid (CAD) forwarding sump malfunctioned, leaving the pumps disabled. The entire drain system filled up with water until the liquid level reached the lowest over flow point, which is part of an acid piping containment trench. The diluted acid flowed out the trench directly into a storm sewer, which drains into the river along with our treated effluent. The total amount of acid flushed out of the forwarding sump amounted to about 45 gallons of concentrated acids (Nitric acid and Hydrofluoric acid). This was diluted by our normal wastewater flows before it entered the river to about .04% acid, with pH of about 2.5. There was about 90ppm HF in the effluent for the spill period of 6-8 hours.

As soon as the problem was noted steps were taken to begin pumping out the outer containment around the CAD sump. When this was pumped down to a safe level the CAD forwarding sump was turned on manually, lowering the liquid level and stopping the flow to the river. The controls were restored to normal operating mode and the problem should not recur.

Thank you

Sincerely yours,

WACKER SILTRONIC CORPORATION

Greg Carr
Facilities Engineer

GC/md

SCOEPA00035193

~~Strong~~ Weak acid spill 8/3 - 8/4 '83

Apparently instrument tec or operator failed to turn on pneumatic switches on pump control panel after purging. Tank level indicator was at ~10", which is not unusual enough to trigger a response by the operator.

Tank filled up & backed up into drain system and acid trench. Eventually acid began to run out of system through a clean-out in the drain system & overflowed out of acid trench at a low point in the back yard. This overflow runs to river with no monitoring.

Containment sump around CAD forwarding sump gradually filled up due to leaks on seam of roof of tank. When alarm went off operator began to work to pump down containment sump. (Inner tank cannot be pumped out until containment sump is empty due to possibly floating inner sump.)

Operator at this time believed overflow of pipe trench was due to a plugged drain line between trench and CAD tank. Water ~~was~~ is continually added to ~~inside~~ inside tank's dike area to keep down acid fumes. Operator did not believe CAD tank was full due to low reading on tank gauge & did not want to turn on forwarding pumps until outer containment was pumped down.

When outer sump was pumped down the CAD forwarding pumps were turned on manually to pump out the tank. The water levels in the acid trench went down, run off to river stopped, & levels became normal.

The instrument panel was opened up & the closed-off valves discovered. They were opened up & normal controls resumed.

WWTP handling strong acid surge well.

Estimate flows 10-15 GPM for 4-6 hours. Concentrations of HF & [illegible]03

SCOEPA00035194

WACKER

# WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

July 14, 1983

Chuck Clinton
Oregon DEQ
Northwest Region
PO Box 1760
Portland, Oregon 97207

Subject: NPDES Monitoring June 1983

Dear Chuck:

Thank you for your visit to our plantsite on 7/8. If you have any further questions please feel free to give me a call.

During June, the B.O.D. on the river effluent was higher than the recent past. I am not sure what has caused this, but I will be looking into this problem. The TSS was considerably lower due to the improved operation of the new pH control system. However, the fluoride levels were higher due to the addition of waste caustic along with the lime to neutralize the concentrated acid stream. Addition of the caustic improves the pH control and TSS control, but impairs fluoride removal. This problem remains to be optimized. I will be working on this during July also. All other parameters were fine.

Sincerely yours,

WACKER SILTRONIC CORPORATION

Greg Carr

GC/kk

DEPARTMENT OF ENVIRONMENTAL QUALITY
SOURCE INSPECTION FORM

El No. 93450

☒ WQ
☐ SW
☐ AQ
☐ NC

COUNTY: Multnomah

SOURCE NAME: Wacker Siltronics

OFFICIAL CONTACTED: Greg Carr

SOURCE ADDRESS: End N.W Front Portland

| TABLE A PARA | PREP TIME | TRANS TIME | INSPECTION TIME | PAPER TIME |
|---|---|---|---|---|
| | | | | |

| PERMIT NUMBER CO. | PERMIT NUMBER SOURCE | POINT | ACTION NO. | ACTION | ACTION TYPE | DATE SCHEDULED MO. DAY YR. | DATE ACHIEVED MO. DAY YR. | RESULT | INSPEC. NO. |
|---|---|---|---|---|---|---|---|---|---|
| | 2834J | | | 7 | | | 7 08 83 | X | |

81
82
83
84

**COMPLIANCE STATUS** *(RESULT CODE)*

| | IN COMP. | NOT IN COMPLIANCE | ON SCHEDULE |
|---|---|---|---|
| All permit conditions | Q | | |
| Permit emission limits | R | A | I |
| Emission standards | S | B | J |
| Performance reqts. | T | C | K |
| Monitoring & Reporting | U | D | L |
| Open burning limits | V | E | M |
| Procedural Reqts. | W | F | N |
| Fugitive emissions | X | G | O |
| Other | Y | H | P |

**TREATMENT/PROCESS EQUIPMENT — ADDITIONAL REMARKS — OPERATING CONDITIONS**

Weak Acid Tank - 7.5 pH
CWW Neutralization Tank - goes to city
sewer PH 7.5
Effluent to river running at 8.0
~~Sta~~ Clarifier Effluent running at 8.0
Monitoring Records ~~[illegible]~~ ~~[illegible]~~ were found ok
Sample at Effluent taken

SOURCES IN VIOLATION & LIMITS VIOLATED

Charles R Plinton 7/8/83
SIGNATURE OF INSPECTOR AND DATE

SOURCE COPY

Gregory G. Carr 7/8/83
SIGNATURE OF PERSON INTERVIEWED AND DATE

DEQ/RO-101 (4/80)

SCOEPA00035196

WACKER

# WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

June 15, 1982

Department of Environmental Quality
N.W. Region - Water Quality Division
P.O. Box 1760
Portland, Oregon 97207

Attention: Chuck Clinton

Ref: NPDES Permit # OR003058-9

Dear Sir:

For your information I have assembled a list of activities and observations for the month of May, 1982 as related to the N.P.D.E.S. parameters:

Fluoride

The fluoride ion level is stable and within limits, (see Figure No. 1).

TSS

As indicated in Figure No. 1, the TSS levels have elevated this month. This increase is attributable to the increased solids in the waste stream directed to the clarifier. We are currently adjusting the chemical feed to the clarifier in response to this change.

BOD

As reported last month, a plugged line in our Lapping Liquids waste stream forced an overflow into the waste treatment piping system causing an abnormally high BOD loading. The Lapping Liquids stream is normally directed to the city sewer. The 170 ppm spike seen on Figure No. 1 near the first of the month was left over from this same problem.

pH

We have recently received approval to modify the existing single-stage neutraization system at our Waste Treatment Plant. This modification will add a second-stage neutralization step and is scheduled for completion by late Fall, 1982.

SCOEPA00035197

WACKER

pH (continued)

During the month of May, revision of the $H_2SO_4$ system at the Waste Treatment Plant was completed. This project improves the reliability of this portion of the pH control system.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis

JE/kk

cc: S. Beiswenger
J. Pittman
Dr. M. Russ
File

WACKER

WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

April 16, 1982

Department of Environmental Quality
N.W. Region - Water Quality Division
P.O. Box 1760
Portland, Oregon 97207

Attention: Chuck Clinton

Ref: N.P.D.E.S. Permit No. OR003058-9

Dear Sir:

For your information, I have assembled a list of activities and observations for the month of March, 1982 as related to the N.P.D.E.S. parameters:

Fluoride

The fluoride ion level is stable and within limits, (see Figure 1).

TSS

The total suspended solids improved from February's high and erratic levels, but still remains high. There has been no improvement in our ability to stabilize the pH of the waste stream going to the clarifier.

BOD

The BOD level remains high through April. We are now monitoring the waste streams from the Q.C. labs and Final Cleaning area with a composite sampler in order to accurately evaluate their contributions to the BOD problem. One source of BOD (an anti-foaming agent) was recently discovered that has apparently been injected into the wrong system since plant start-up. This connection will be corrected by April 23, 1982. The effect of this correction on our BOD levels in the combined effluent cannot be estimated at this time.

pH

We are modifying the $H_2SO_4$ supply piping system at the Waste Treatment Plant to provide a more reliable source of reagent to the two existing neutralization tanks. In addition, a third branch will extend the use of $H_2SO_4$ to the concentrated acid neutralization tank which in turn goes to the clarifier. Completion of this project is expected by mid-May, 1982.

SCOEPA00035199

WACKER

pH (continued)

During the month of March, the average daily flow on sample days was 936.0 $m^3$/day compared to a month-long daily average of 918.4 $m^3$/day. Consequently, the month-long average daily loading values are somewhat high.

Sincerely,

James R. Ellis
Facilities Manager

SB/JE/kk

Attachment

cc: S. Beiswenger
J. Pittman
M. Russ
File

WACKER

# WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

March 12, 1982

Department of Environmental Quality
N.W. Region - Water Quality Division
P.O. Box 1760
Portland, Oregon 97207

Attention: Chuck Clinton

Ref: N.P.D.E.S. Permit No. OR003058-9

Dear Sir:

For your information, I have assembled a list of activities and observations for the month of February, 1982 as related to the N.P.D.E.S. parameters:

FLUORIDE

The fluoride ion level is stable and within limits, (see Fig. No. 1).

TSS

The total suspended solids level was high and erratic for February. As we've mentioned before, this is a very sensitive operation and it is easily upset by a great many factors. We have not entirely figured out yet what the cause of this upset has been, but it appears to be related to a combination of the influent pH to the clarifier and the composition of the waste stream. We are continuing to try to isolate the cause and correct it.

BOD

The level of BOD was still high through February. Four waste streams which contribute to this level are under active investigation. The first two, a reference lapping machine waste and a plate lapping waste have been diverted to the sewer. The second two are still being evaluated for their levels of BOD and may be diverted. The first of these is the sink drains from a series of Q.C. labs. The second is a rinse water drain from our Final Cleaning area. Neither appears to contribute a great deal to the waste BOD level. We are continuing to evaluate the alternatives available and their relative costs to remove or reduce the BOD level in the final combined waste stream.

pH

On February 19th, the piping to the 'WAD' (weak acid-caustic drain) neutralization system was modified to improve it's ability to neutralize that waste stream. The effluent from this neutralization when mixed with the clarifier effluent is the combined discharge regulated by the permit. As a result of the piping change, the oscillations in pH which previously occurred have been con-

SCOEPA00035201

pH (continued)

siderably reduced.

During the month of February, the average daily flow on sample days was 885.3 $m^3$/day as compared to a month long average of 844.1 $m^3$/day. As a consequence, the monthly average loading values are somewhat high.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis

James R. Ellis
Facilities Manager

JE/kk

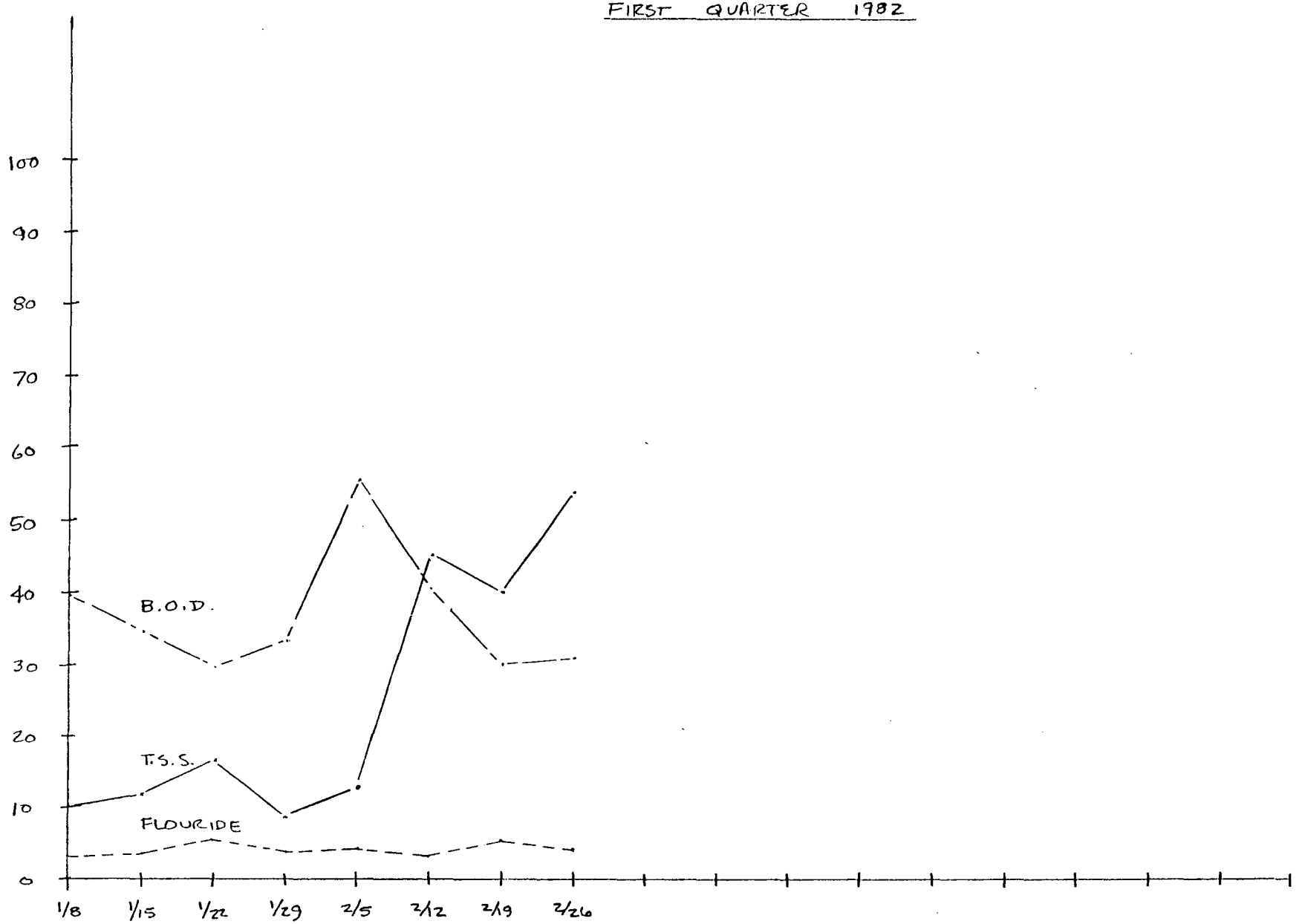
cc: Steve Beiswenger
Dirk Dunning
Gary Pendleton
John Pittman
Mal Russ
File

DD
3/82

# FIGURE No. 1 - WACKER SILTRONIC CORP.

## N.P.D.E.S. DISCHARGE PARAMETERS

## FIRST QUARTER 1982




SCOEPA00035203

Dunning

WACKER

# WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

December 22, 1981

Department of Environmental Quality
Northwest Region
Water Quality Division
P.O. Box 1760
Portland, Oregon 97207

Subject: N.P.D.E.S. Permit No. OR0030589

Attention: Larry Patterson

Dear Mr. Patterson:

I am writing to confirm our telephone conversation of December 18th regarding the emergency repair of a sub-grade drain line servicing wafer cleaning machines. Waste from these machines normally flows through our "organic waste" system and on into the sanitary sewer. During the repair of this drain system, however, it will be necessary to divert this organic waste to the silicon solids waste system which passes through the neutralization and clarification section of our wastetreatment plant and out to the Willamette River, (N.P.D.E.S. permit). Because we have no biological treatment, this diversion would raise the BOD level of the above-described stream for the period, December 22 through December 31.

This emergency diversion would result in an increase of BOD loading to the river of approximately 42 kg per day and increased flow of approximately 115 cubic meters per day during the specified period. Additional B.O.D. is caused by an alkaline industrial detergent blended with citric acid in RO/DI water. There is no suspended solids and dissolved solids are present only due to the chemicals mentioned.

I am asking for approval of this plan to effect this emergency repair. All other alternatives have been explored but are not feasible.

If there are further questions, please contact me. Thank you for your cooperation on this matter.

Sincerely,

WACKER SILTRONIC CORPORATION

James R. Ellis
Facilities Manager

JE/kk

SCOEPA00035204

DEPARTMENT OF ENVIRONMENTAL QUALITY
SOURCE INSPECTION FORM

[X] WQ
[ ] SW
[ ] AQ
[ ] NC

COUNTY: Multnomah

SOURCE NAME: Wacker Siltronics

OFFICIAL CONTACTED: Dirk Dunning

SOURCE ADDRESS: End of NW Front Portland

| TABLE A PARA | PREP. TIME | TRANS. TIME | INSPECTION TIME | PAPER TIME |
|---|---|---|---|---|
| | 0.0 | 0.8 | 0.5 | 0.3 |

| PERMIT NUMBER CO. | PERMIT NUMBER SOURCE | POINT | ACTION NO. | | ACTION TYPE | DATE SCHEDULED MO. DAY YR. | DATE ACHIEVED MO. DAY YR. | RESULT | INSPEC. NO. |
|---|---|---|---|---|---|---|---|---|---|
| 26 | 2834-J | 000 | 01 | 7 | 07 | 6 16 81 | 6 16 81 | A X | B 06 |

81 all equipment operating - compliance program in progress
82
83
84

**COMPLIANCE STATUS** *(RESULT CODE)*

| | IN COMP. | NOT IN COMPLIANCE | ON SCHEDULE |
|---|---|---|---|
| All permit conditions | Q | | |
| Permit emission limits | R | X | I |
| Emission standards | S | B | J |
| Performance reqts. | T | C | K |
| Monitoring & Reporting | X | D | L |
| Open burning limits | V | E | M |
| Procedural Reqts. | X | F | N |
| Fugitive emissions | X | G | O |
| Other | Y | H | P |

**TREATMENT/PROCESS EQUIPMENT – ADDITIONAL REMARKS – OPERATING CONDITIONS**

Process Wastewater flow 170gpm ave, range 140-200gpm pH 7.4

Neutralized organic wastewater (city sewer) 50gpm ave, range 40-60gpm pH 7.9

Chromic wastes collected separate and disposed of at Arlington Oreg.

Silica sludge disposed at St. Johns Landfill - 10yds/wk

Organics - chlorinated solvents - disposed of at Arlington (TCE & Freon)

Split sample of process wastewater (24hr comp) collected

**SOURCES IN VIOLATION & LIMITS VIOLATED**

monthly violations of BOD, TSS, & $Fl^-$ limitations - control and reduction program in process with regular reports to NWR.

Stephen Cantor June 16 '81
SIGNATURE OF INSPECTOR AND DATE

SOURCE COPY

[signature] 6/16/81
SIGNATURE OF PERSON INTERVIEWED AND DATE

DEQ/RO-101 (4/80)

SCOEPA00035205

WACKER

# WACKER SILTRONIC CORPORATION

P.O. BOX 03180 • PORTLAND, OREGON 97203
7200 N.W. FRONT AVENUE • PORTLAND, OREGON 97229 (503) 243-2020

February 13, 1981

Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Attention: Mr. Stephen C. Carter

Dear Sir:

Pursuant to our most recent telephone conversation, I am writing this letter to inform you of activities related to our program to improve our N.P.D.E.S. parameters. During January, we have directed most of our efforts into two separate projects:

A.) We requested that Mr. Marty Warner, CH2M HILL's waste treatment start-up engineer, be brought back into the plant to review our operating procedures and make certain that they are consistent with the existing equipment and the intent of the design. We also requested that Mr. Warner review the character of all the waste streams to be certain that no major changes had occurred in the first six months of full operation.

To enhance our data-gathering procedures we also added a water chemist to our staff shortly after the Christmas holidays. Much of the chemist's time has been spent with Mr. Warner in analyzing chemical treatment and the composition of the various inlet streams. We feel that preliminary improvements in total suspended solids and fluoride levels (see attached Figure No. 1) can be partially attributed to the efforts put into this project.

B.) As of January 21, 1981, the lapping waste stream, which had previously been found to be unexpectedly high in organic content, was diverted from river discharge to the sanitary sewer. Three B.O.D. data points since the diversion, indicate substantial improvement, (see attached Figure No. 1).

From the analysis of individual streams, it is anticipated, however, that the river discharge B.O.D. will range between 20-40 mg/l. In an effort to reduce B.O.D. levels further, we are dye-checking several additional waste systems to determine if inadvertant cross-connections were made during construction.

SCOEPA00035206

B.) (continued)

Mr. Harry Edmonds and Mr. Bob Jensen visited the plant yesterday, February 11, to inspect our facilities for the diversion of the lapping waste to the sanitary sewer. They raised no objections to the quality or quantity of liquid which has been diverted and indicated that they anticipate no problems with their treatment plant.

Even though preliminary results appear positive, more time will be necessary to fully evaluate the results of our current projects. We will continue our emphasis on this overall program. You will be kept up-to-date on N.P.D.E.S.-related results.

Please call if there are any questions or comments.

Sincerely,

WACKER SILTRONIC CORPORATION

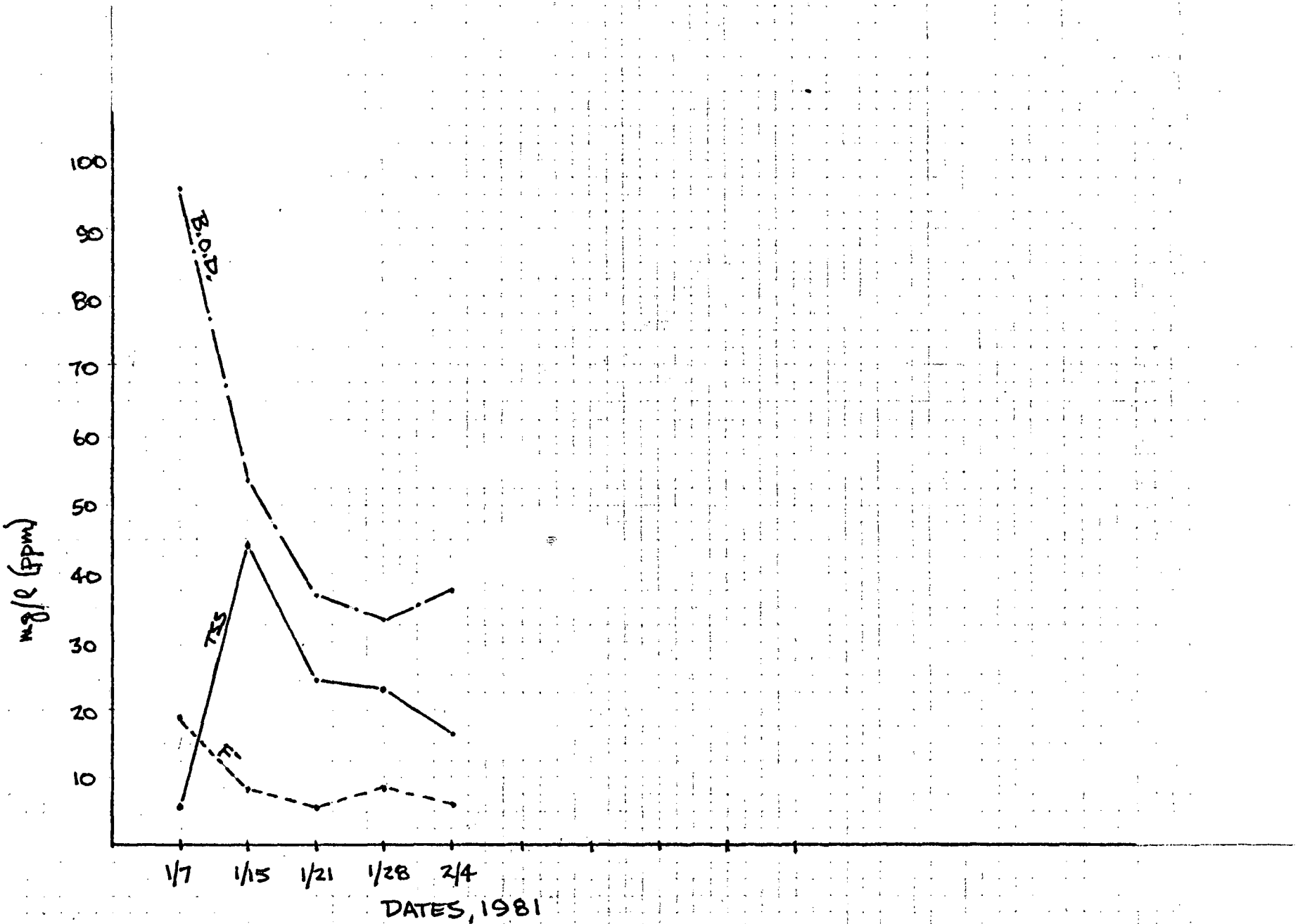
James R. Ellis
Facilities Manager

JRE/kk

Attachment (1)

cc: Mal Russ
John Pittman
Dirk Dunning
Fred Wale
Steve Beiswenger
File

# FIGURE No. 1
## N.P.D.E.S. DISCHARGE PARAMETERS




SCOEPA00035208

TO: John Pittman

FROM: Greg Carr GC

SUB: Outfall pH Compliance, December 1984

DATE: January 9, 1985

The pH compliance at the outfall was very poor this month - we were out a total of 5790 minutes, or 13.0% of the time. Our regulatory limit is 1% of the time.

A lot of this time, the pH at the outfall was below the pH at the WWTP. This is expected since the RO units add acid to the stream. We can counteract this by raising the pH at the WWTP, but since the RO units do shut off and stop their acid addition we will have occasional excursions on the high side while they are off.

If the pH at the WWTP is running 8.0 to 8.2 ph, the outfall would be 6.5 or so normally. The limits are 6.0 to 9.0 at the outfall.

This month, however we have had to continously blow down the boilers a lot because of some sort of contamination in the water. This adds caustic into the outfall, raising the pH instead of lowering it. This would be very bad if the pH at the WWTP is adjusted up to counteract the RO blowdown.

As a minimum, we may need to direct the drain from the boiler blowdown separator to the WAD system. There are some cleanouts about 100' away we can run to with a buried line outside the building. This should allow us to run the WWTP effluent at a consistent high pH (8.5-9.0) to counteract the RO blowdown.

If this is not sufficient to achieve a 99% compliance, then more drastic measures such as diverting the RO Blowdown to the WAD system and modifying the WAD system to handle the additional 50 GPM will be necessary, or installing a data link between the outfall pH meter and the WWTP for active feed-back control. I have an EWR #06088 to cover this work.

GC/md

cc: Gary Pendleton
George Stevens
File

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location [illegible])

[redacted]

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

# DISCHARGE MONITORING REPORT (DMR)

Form Approved
[illegible] No. 158-R0073

| (2-16) | (17-19) |
|---|---|
| [illegible]-003058-7 | 56 |
| PERMIT NUMBER | DISCHARGE NUMBER |

2834-1
93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | [illegible] | 12 | 01 | TO | [illegible] | 12 | 01 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | SAMPLE MEASUREMENT | [illegible] | [illegible] | GPD | — | — | — | — | | Cont. total | |
| | PERMIT REQUIREMENT | [illegible] | [illegible] | | — | — | — | | | [illegible] | |
| BOD | SAMPLE MEASUREMENT | [illegible] | [illegible] | #/D | 53 | 77 | 123 | mg/l | 1 | 1/7 | 24 HC |
| | PERMIT REQUIREMENT | [illegible] | [illegible] | | [illegible] | [illegible] | 90 | | | [illegible] | [illegible] |
| MVI [illegible] | SAMPLE MEASUREMENT | 90 | 100 | #/D | 30 | 38 | 46 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | [illegible] | [illegible] | | — | [illegible] | 60 | | | [illegible] | [illegible] |
| [illegible] Cr 6+ | SAMPLE MEASUREMENT | .002 | .003 | #/D | <.001 | <.001 | .001 | mg/l | 0 | [illegible] | [illegible] |
| | PERMIT REQUIREMENT | .03 | .1 | | — | [illegible] | .05 | | | [illegible] | [illegible] |
| MVI Cr Total | SAMPLE MEASUREMENT | .008 | .018 | #/D | .002 | .003 | .007 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | .5 | 1.0 | | — | [illegible] | 1.0 | | | [illegible] | [illegible] |
| MVI Flouride | SAMPLE MEASUREMENT | 12.6 | 18.5 | #/D | 3.8 | 4 | 7.6 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | [illegible] | [illegible] | | — | [illegible] | 16 | | | [illegible] | [illegible] |
| OUTFALL PH | SAMPLE MEASUREMENT | | | — | | | | PH units | 12 | continuous | |
| | PERMIT REQUIREMENT | | | | 6.0 | [illegible] | 9.0 | | | [illegible] | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| [illegible] | | | 503 | 243-2020 | [illegible] | 01 | 14 |
| TYPED OR PRINTED | | | AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

[illegible] PH was [illegible] 878 at the time.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)



SCOEPA00035210

PERMITTEE NAME/ADDRESS (Include Facility Name/Location [illegible])

NAME [illegible]

ADDRESS [illegible]

FACILITY [illegible]

LOCATION [illegible]

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

# DISCHARGE MONITORING REPORT (DMR)

Form Approved
[illegible] No. 158-R0073

2834-J
93450

| (2-16) | (17-19) |
|---|---|
| ORA-003058-7 | 56 |
| PERMIT NUMBER | DISCHARGE NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 12 | 01 | TO | 84 | 12 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TTO [illegible] | SAMPLE MEASUREMENT | — | — | — | — | — | 1.16 | mg/l | 0 | 1/mo | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 1.37 | | | " | " |
| Downdrain Flow MP3 | SAMPLE MEASUREMENT | 237,000 | 360,000 | GPD | — | — | — | | | Continuous | |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | Total Gauge | |
| Total PO3 | SAMPLE MEASUREMENT | — | — | — | <.1 | .4 | .9 | mg/l | 0 | 1/2 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | [illegible] | [illegible] | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Outfall Flow | SAMPLE MEASUREMENT | 527,000 | 683,000 | GPD | — | — | — | | | 1/1 | Total |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | Gauge |
| Outfall Temp | SAMPLE MEASUREMENT | — | — | — | 18.4 | 18.9 | 19.2 | °C | 0 | 1/2 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 29.4 | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| J Pittman / Dir Eng | | | 503 | 243-2020 | 85 | 01 | 14 |
| TYPED OR PRINTED | | | AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

STAMP HERE

FOLD HERE THIRD

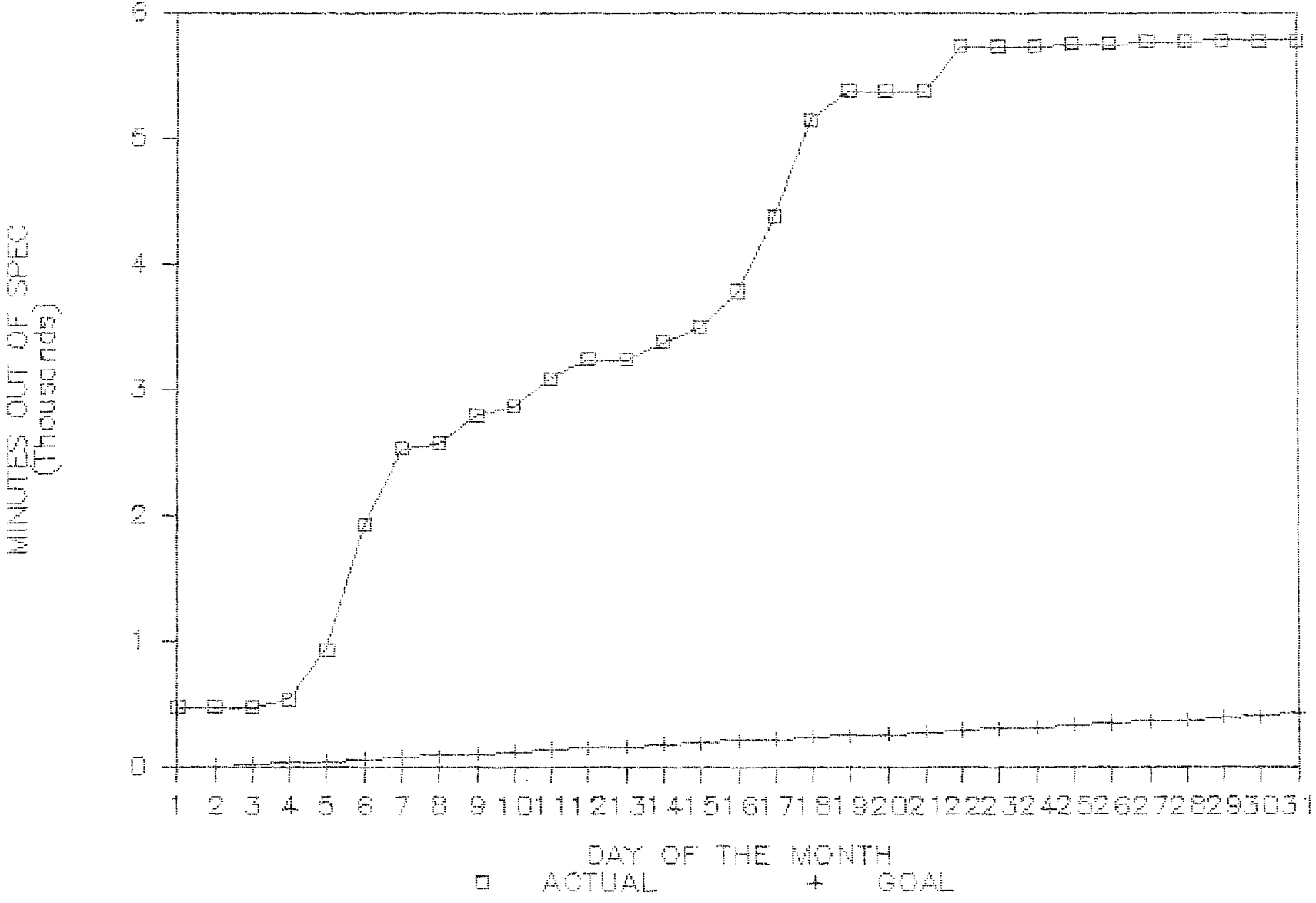
SAMPLE HERE

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)



SCOEPA00035211

# pH COMPLIANCE DECEMBER 84




SCOEPA00035212

OMP1234 TIME OUT TO PRINT SHEET PRESS [ALT] AND[P] AT THE SAME TIME FOR GRAPH HOLD [ALT] AND [G] AT THE SAME TIME

| DY | YR | OF pH | DY OF MO | OW TOT | COMB TOT | MW2 TOT | MW3 TOT | OW FLOW | | COMB FLOW | MW2 FLOW | MW3 FLOW | OUTF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 335 | 6.0 - 9.0 | 1 | 49138 | 355602 | 1550214 | 2798285 | 303 | 1 | 1094 | 106 | 1189 | |
| | 336 | 482.5 | 2 | 57139 | 384516 | 1550494 | 2801427 | 324 | 2 | 984 | 130 | 1361 | |
| | 337 | 482.5 | 3 | 65699 | 410514 | 1550837 | 2805022 | 331 | 3 | 1218 | 175 | 1363 | |
| | 338 | 487.9 | 4 | 74449 | 442705 | 1551300 | 2808522 | 358 | 4 | 1174 | 146 | 962 | |
| | 339 | 552.5 | 5 | 83917 | 473733 | 1551686 | 2811164 | 364 | 5 | 1080 | 173 | 1185 | |
| | 340 | 939 | 6 | 93537 | 502265 | 1552142 | 2814295 | 368 | 6 | 1023 | 169 | 1017 | |
| | 341 | 1949.9 | 7 | 103250 | 529285 | 1552588 | 2816982 | 338 | 7 | 1145 | 163 | 661 | |
| | 342 | 2543 | 8 | 112178 | 559538 | 1553018 | 2818729 | 305 | 8 | 1105 | 157 | 811 | |
| | 343 | 2582 | 9 | 120227 | 588757 | 1553432 | 2820871 | 303 | 9 | 1124 | 163 | 783 | |
| | 344 | 2809.3 | 10 | 128224 | 618452 | 1553862 | 2822940 | 325 | 10 | 1095 | 145 | 805 | |
| | 345 | 2873.6 | 11 | 136816 | 647400 | 1554244 | 2825068 | 338 | 11 | 1018 | 152 | 797 | |
| | 346 | 3096.7 | 12 | 145742 | 674295 | 1554546 | 2827173 | 300 | 12 | 1024 | 132 | 805 | |
| | 347 | 3251.8 | 13 | 153657 | 701344 | 1554996 | 2829301 | 330 | 13 | 1086 | 154 | 833 | |
| | 348 | 3254.2 | 14 | 162391 | 730031 | 1555404 | 2831501 | 362 | 14 | 959 | 162 | 833 | |
| | 349 | 3388.4 | 15 | 171945 | 755379 | 1555831 | 2833701 | 381 | 15 | 1050 | 180 | 863 | |
| | 350 | 3502.6 | 16 | 182007 | 783132 | 1556307 | 2835981 | 325 | 16 | 992 | 116 | 871 | |
| | 351 | 3791.1 | 17 | 190588 | 809351 | 1556614 | 2838281 | 389 | 17 | 1251 | 193 | 949 | |
| | 352 | 4397.8 | 18 | 200860 | 842399 | 1557123 | 2840788 | 317 | 18 | 1047 | 117 | 794 | |
| | 353 | 5163.2 | 19 | 209223 | 870058 | 1557431 | 2842885 | 245 | 19 | 1025 | 141 | 1072 | |
| | 354 | 5390.2 | 20 | 215701 | 897171 | 1557803 | 2845718 | 429 | 20 | 1163 | 164 | 887 | |
| | 355 | 5390.2 | 21 | 227041 | 927902 | 1558235 | 2848052 | 376 | 21 | 1105 | 182 | 887 | |
| | 356 | 5390.2 | 22 | 235953 | 957096 | 1558718 | 2850406 | 346 | 22 | 1134 | 183 | 887 | |
| | 357 | 5737.2 | 23 | 246102 | 987053 | 1559201 | 2852749 | 376 | 23 | 1234 | 125 | 737 | |
| | 358 | 5737.2 | 24 | 256029 | 1019660 | 1559531 | 2854697 | 376 | 24 | 1199 | 152 | 642 | |
| | 359 | 5737.2 | 25 | 265974 | 1051327 | 1559932 | 2856393 | 353 | 25 | 1055 | 170 | 1047 | |
| | 360 | 5762.2 | 26 | 275296 | 1079197 | 1560382 | 2859158 | 406 | 26 | 1096 | 144 | 517 | |
| | 361 | 5762.7 | 27 | 286034 | 1108154 | 1560762 | 2860788 | 351 | 27 | 1141 | 169 | 1036 | |
| | 362 | 5777.3 | 28 | 295314 | 1138308 | 1561209 | 2863525 | 366 | 28 | 1051 | 114 | 779 | |
| | 363 | 5778.2 | 29 | 304985 | 1166073 | 1561511 | 2865583 | 343 | 29 | 1012 | 129 | 801 | |
| | 364 | 5789.6 | 30 | 314051 | 1192822 | 1561851 | 2867698 | 342 | 30 | 1063 | 122 | 785 | |
| | 365 | 5789.6 | 31 | 323080 | 1220894 | 1562174 | 2869771 | 317 | 31 | 1243 | 157 | 785 | |
| | 366 | 5789.6 | 1 | 331466 | 1253741 | 1562589 | 2871844 | | 1 | | | | |

| STREAM | COMBINED | OW | MW2 | MW3 | OUTFALL |
|---|---|---|---|---|---|
| MAXIMUM FLOW MB/DY | 1250.87 | 429.22 | 192.66 | 1362.60 | 2581.07 |
| MINIMUM FLOW MB/DY | 959.42 | 245.19 | 105.98 | 616.95 | 1712.98 |
| AVERAGE FLOW MB/DY | 1095.60 | 344.71 | 151.10 | 898.12 | 1994.72 |
| MAXIMUM FLOW GPM | 229.48 | 78.74 | 35.34 | 249.97 | 473.51 |
| MINIMUM FLOW GPM | 176.01 | 44.98 | 19.44 | 113.18 | 314.25 |
| AVERAGE FLOW GPM | 201.18 | 63.24 | 27.72 | 164.76 | 365.94 |
| TOTAL FLOW GALLONS | 8980468 | 2822990 | 1237373 | 7355045 | 16335513 |
| DAILY FLOW GALLONS | 289693 | 91064 | 39915 | 237260 | 526952 |

TOTAL FLOW TO CITY SEWER
4060363 GALLONS

| DATE | OW | | METER VAULT THREE | | | COMBINED DISCHARGE | |
|---|---|---|---|---|---|---|---|
| | BOD | TSS | PHOSPHATE | pH | TEMP | pH | TEMP |
| 7 | 250 | 206 | 0.1 | 5.2 | 16.3 | 7.4 | 19.1 |
| 14 | 293 | 158 | 0.1 | 6 | 14.2 | 6.8 | 18.7 |
| 21 | 258 | 214 | 0.9 | 5.7 | 14.9 | 6.6 | 18.4 |
| 28 | 220 | 158 | 0.6 | 6.3 | 13.2 | 7.7 | 19.2 |
| AVERAGE | 257.75 | 184 | 0.425 | 5.8 | 14.65 | 7.125 | 18.85 |

| DATE | LBS BOD IN OW | LBS TSS |
|---|---|---|
| 7 | 194 | 153 |
| 14 | 234 | 126 |
| 21 | 214 | 177 |
| 28 | 178 | 128 |

SCOEPA00035213

0 0 0

AVERAGE 163.70950 AVERAGE 116.83841

AVERAGE TOTAL LBS/MO 6073 4 LBS/MO

DAY ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW

| ANALYSIS | PARAMETERS | * | BOD | TSS | CR 6+ | CR TOTAL | FLUORIDE |
|---|---|---|---|---|---|---|---|
| 7 | MG/L | * | 53.00 | 39.00 | 0.0010 | 0.0070 | 3.80 |
| OUTFALL | MG/L | * | 33.60 | 24.72 | 0.0006 | 0.0044 | 2.41 |
| | KG/DAY | * | 60.69 | 44.66 | 0.0011 | 0.0080 | 4.35 |
| | LBS/DAY | | 133.79 | 98.45 | 0.0025 | 0.0177 | 9.59 |
| 14 | MG/L | * | 68.00 | 30.00 | 0.0010 | 0.0020 | 4.90 |
| OUTFALL | MG/L | * | 36.40 | 16.06 | 0.0005 | 0.0011 | 2.62 |
| | KG/DAY | * | 65.24 | 28.78 | 0.0010 | 0.0019 | 4.70 |
| | LBS/DAY | | 143.83 | 63.45 | 0.0021 | 0.0042 | 10.36 |
| 21 | MG/L | * | 65.00 | 38.00 | 0.0010 | 0.0020 | 7.60 |
| OUTFALL | MG/L | * | 36.05 | 21.08 | 0.0006 | 0.0011 | 4.22 |
| | KG/D | * | 71.82 | 41.99 | 0.0011 | 0.0022 | 8.40 |
| | LBS/DAY | | 158.34 | 92.57 | 0.0024 | 0.0049 | 18.51 |
| 28 | MG/L | * | 123.00 | 46.00 | 0.0010 | 0.0020 | 5.20 |
| OUTFALL | MG/L | * | 70.64 | 26.42 | 0.0006 | 0.0011 | 2.99 |
| | KG/DAY | * | 129.26 | 48.34 | 0.0011 | 0.0021 | 5.46 |
| | LBS/DAY | | 284.97 | 106.57 | 0.0023 | 0.0046 | 12.05 |
| 5 | MG/L | * | | | | | |
| OUTFALL | MG/L | * | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | KG/DAY | * | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | LBS/DAY | | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| AVERAGE | MG/L COMBINED | | 77.25 | 38.25 | 0.0010 | 0.0033 | 5.38 |
| | MG/L OUTFALL | | 44.17 | 22.07 | 0.0006 | 0.0019 | 3.06 |
| 4 | KG/DAY | * | 81.75 | 40.94 | 0.0011 | 0.0036 | 5.73 |
| | LBS/DAY | | 180.23 | 90.26 | 0.0023 | 0.0079 | 12.63 |
| MAXIMUM | MG/L COMBINED | | 123.00 | 46.00 | 0.0010 | 0.0070 | 7.60 |
| | MG/L OUTFALL | | 70.64 | 26.42 | 0.0006 | 0.0044 | 4.22 |
| | KG/D | * | 129.26 | 48.34 | 0.0011 | 0.0080 | 8.40 |
| | LBS/DAY | | 284.38 | 106.35 | 0.0025 | 0.0176 | 18.48 |
| MINIMUM | MG/L COMBINED | | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | MG/L OUTFALL | | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | KG/DAY | * | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | LBS/DAY | | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 12/7/82
ANALYSTS: [signature] / Elmer Lim / Hong L.

FACILITIES MGR.
FACILITIES OP. SUPR
ENVIRONMENTAL ENGR
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 53 | + 260 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 39 | + 206 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 3.8 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.007 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.2 | ▲ 7.4 | |
| Temperature | °C | – | – | 27 | | | ▲ 16.3 | ▲ 19.1 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035215

# WEEKLY WASTEWATER ANALYSIS

FACILITIES MGR.
FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

TO: DISTRIBUTION
DATE: 12/14/84
ANALYSTS: [signature] / Elinor Levin / Hong L.

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 68 | + 293 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 30 | + 158 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.9 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 6.0 | ▲ 6.8 | |
| Temperature | °C | – | – | 27 | | | ▲ 14.2 | ▲ 18.7 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035216

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 12/21/84
ANALYSTS: [signature] Elem Ferri / Nag L.

FACILITIES MGR.
FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 65 | + 258 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 38 | + 214 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 7.6 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 0.9 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.7 | ▲ 6.6 | |
| Temperature | °C | – | – | 27 | | | ▲ 14.9 | ▲ 18.4 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035217

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 12/28/84
ANALYSTS: [illegible] / Ellen Levin / [illegible]

FACILITIES MGR.
FACILITIES OP SUPR
ENVIRONMENTAL ENGR
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲123 | +220 | | | |
| TSS | mg/l | – | 15 | 30 | ▲46 | +158 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲5.2 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲<0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲0.002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲0.6 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲6.3 | ▲7.7 | |
| Temperature | °C | – | – | 27 | | | ▲13.2 | ▲19.2 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035218

Greg Carr

Facility Name/ Location (Current)

[redacted]

# DISCHARGE MONITORING REPORT (DMR)

Approved
No. 158-R0073

| (2-16) | (17-19) |
|---|---|
| OR-003058-7 | 55 |
| PERMIT NUMBER | DISCHARGE NUMBER |

2834-J
93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 11 | 01 | TO | 84 | 11 | 30 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater Flow - MVI | SAMPLE MEASUREMENT | 321,000 | 417,000 | GPD | — | — | — | — | | Cont. totalizing | |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | [illegible] | |
| MVI BOD | SAMPLE MEASUREMENT | 143 | 182 | #/D | 32 | 48 | 62 | mg/l | 2 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 120 | 240 | | — | 45 | 90 | | | | |
| MVI TSS | SAMPLE MEASUREMENT | 94 | 120 | #/D | 27 | 32 | 41 | mg/l | | | " |
| | PERMIT REQUIREMENT | 61 | 160 | | — | 23 | 60 | | | | |
| MVI Cr 6+ | SAMPLE MEASUREMENT | <.003 | .004 | #/D | <.001 | .001 | .001 | mg/l | 0 | | " |
| | PERMIT REQUIREMENT | .03 | .1 | | — | [illegible] | .05 | | | | |
| MVI Cr Total | SAMPLE MEASUREMENT | .013 | .017 | #/D | .002 | .005 | .006 | mg/l | 0 | | |
| | PERMIT REQUIREMENT | .5 | 1.0 | | — | [illegible] | 1.0 | | | | |
| MVI Fluoride | SAMPLE MEASUREMENT | 13.3 | 16.7 | #/D | 3.9 | 4.5 | 5.1 | mg/l | 0 | | " |
| | PERMIT REQUIREMENT | 21.4 | 42.7 | | — | [illegible] | 16 | | | | |
| Outfall pH | SAMPLE MEASUREMENT | — | — | — | 7.1 | [illegible] | 11.0 | pH units | 0 | Continuous | |
| | PERMIT REQUIREMENT | — | — | | 6.0 | [illegible] | 9.0 | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| J P Hunn / Dir Eng | | [signature] | 503 | 2432020 | 84 | 12 | 17 |
| TYPED OR PRINTED | | | AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

pH compliance at the outfall was 99.1% of the time. Total time out of compliance was 387.9 minutes. No violation was longer than 1 hour.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)



SCOEPA00035220

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location [illegible])

NAME [illegible] Corp
ADDRESS [illegible] Box 63180
[illegible] Or 97203
FACILITY [illegible]
LOCATION [illegible] Or 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
[illegible] No. 158-R0073

| (2-16) | (17-19) |
|---|---|
| 02-003058-7 | 55 |
| PERMIT NUMBER | DISCHARGE NUMBER |

2834[illegible]
93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 11 | 01 | TO | [illegible] | [illegible] | [illegible] |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TTO-MV1 | SAMPLE MEASUREMENT | — | — | — | — | — | .28 | mg/l | | 1/mo | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 1.47 | | | 1/1 | 1/1 |
| Blowdown Flow MV3 | SAMPLE MEASUREMENT | 263,000 | 409,000 | GPD | — | — | — | — | | 1/1 | Totalizing |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | Recorder |
| Total $PO_3^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | .1 | .1 | .1 | mg/l | | 1/2 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | 7.0 | 5.0 | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Outfall Flow | SAMPLE MEASUREMENT | 584,000 | 758,000 | GPD | — | — | — | | | 1/1 | Totalizing |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | Recorder |
| Outfall Temp | SAMPLE MEASUREMENT | — | — | — | 16.2 | 17.0 | 18.1 | °C | | 1/2 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 20.4 | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| J Pittman / Dir Eng | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.) | [signature] | 503 | 243-2020 | 84 | 12 | 17 |
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)



SCOEPA00035221

WACKER SILTRONIC CORPORATION

SPECIAL TEST REPORT: INCOMING INSPECTION

TEST METHOD DESCRIPTION AND IDENTIFICATION:

Process Wastewater Grab Sample 11/13/84 1005 hrs
Organic Wastewater Grab Sample 11/13/84 1000 hrs

Analyze for TCE

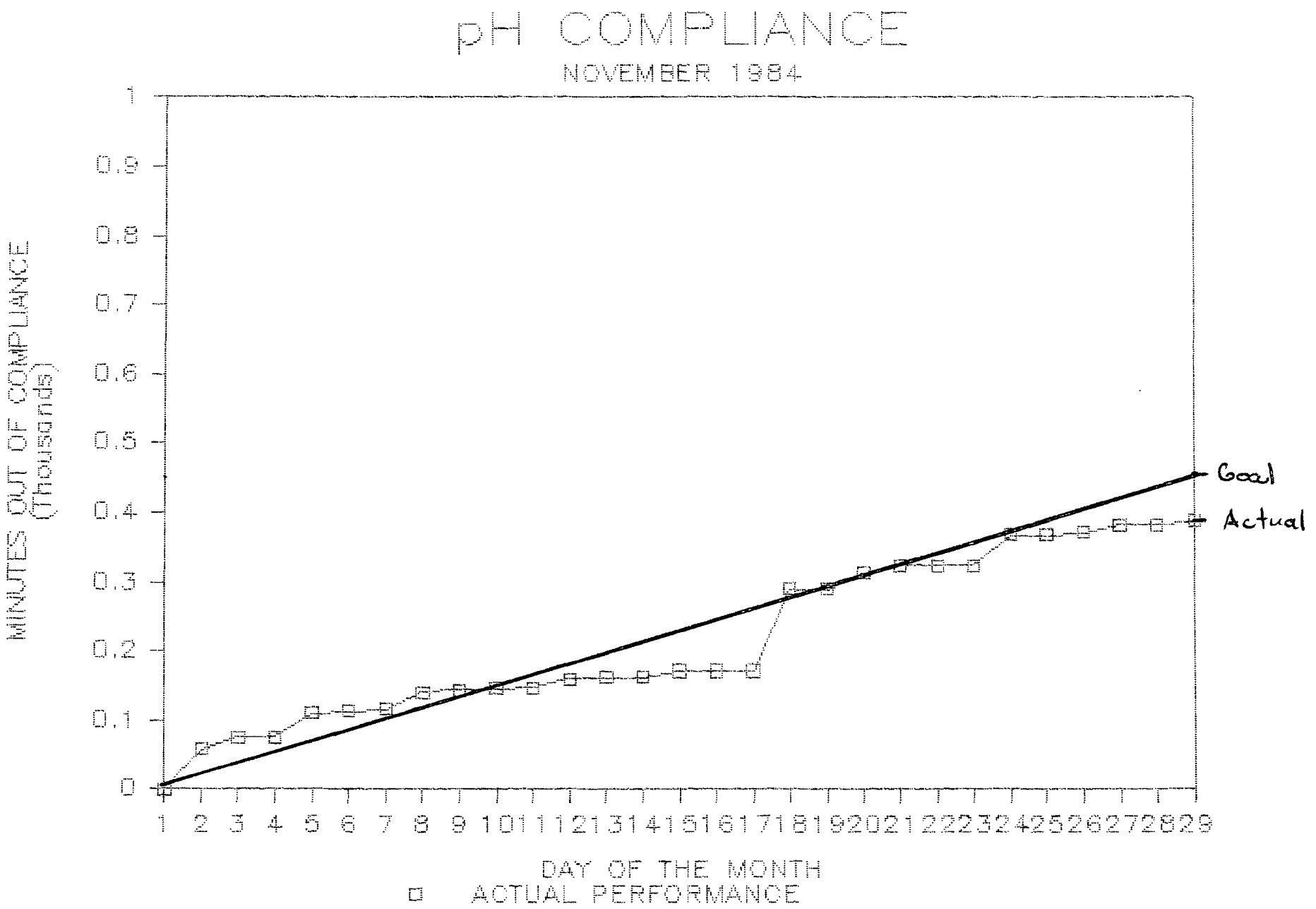
SAMPLE PULLED BY: SAM PENGELLY DATE 11/13/84
SAMPLE ANALYZED BY: Elinor Levin DATE 11/13/84

RESULTS:

| SAMPLE | TCE, PPM |
|---|---|
| Process Wastewater | 0.29 PPM |
| Organic Wastewater | 0.98 PPM |

5th Nov.

Ø Greg Carr




SCOEPA00035223

dwtp1184 TIME OUT TO PRINT SHEET PRESS [ALT] AND [P] AT THE SAME TIME.

| DY OF YR | OF pH | DY OF MO | OWW TOT | COMB TOT | MV2 TOT | MV3 TOT | OWW FLOW | | COMB FLOW | MV2 FLOW | MV3 FLOW | OUTFALL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 305.00 | 6.0 - 9.0 | 1 | 776809 | 366845 | 1539266 | 2717213 | 315 | 1 | 1197 | 173 | 999 | 2195 |
| 306 | 0.00 | 2 | 785122 | 398460 | 1539722 | 2719852 | 406 | 2 | 1580 | 75 | 659 | 2239 |
| 307 | 58.00 | 3 | 795856 | 440192 | 1539921 | 2721593 | 382 | 3 | 1294 | 118 | 760 | 2054 |
| 308 | 76.00 | 4 | 805956 | 474378 | 1540234 | 2723600 | 382 | 4 | 1406 | 126 | 798 | 2204 |
| 309 | 76.00 | 5 | 816045 | 511528 | 1540568 | 2725709 | 292 | 5 | 1337 | 104 | 805 | 2142 |
| 310 | 109.80 | 6 | 823760 | 546851 | 1540843 | 2727837 | 397 | 6 | 1242 | 148 | 815 | 2058 |
| 311 | 112.90 | 7 | 834245 | 579673 | 1541235 | 2729991 | 307 | 7 | 1043 | 78 | 808 | 1851 |
| 312 | 116.30 | 8 | 842355 | 607217 | 1541440 | 2732127 | 330 | 8 | 1181 | 135 | 748 | 1929 |
| 313 | 140.40 | 9 | 851077 | 638421 | 1541796 | 2734104 | 362 | 9 | 1083 | 166 | 621 | 1904 |
| 314 | 145.20 | 10 | 860651 | 667045 | 1542234 | 2736273 | 275 | 10 | 1171 | 182 | 823 | 1994 |
| 315 | 146.00 | 11 | 867908 | 697977 | 1542715 | 2738447 | 304 | 11 | 1228 | 173 | 886 | 2113 |
| 316 | 147.90 | 12 | 875946 | 730408 | 1543172 | 2740787 | 411 | 12 | 1325 | 125 | 785 | 2109 |
| 317 | 160.80 | 13 | 886812 | 765408 | 1543501 | 2742860 | 379 | 13 | 1175 | 185 | 829 | 2005 |
| 318 | 162.70 | 14 | 896813 | 796460 | 1543990 | 2745051 | 304 | 14 | 1036 | 213 | 1208 | 2244 |
| 319 | 162.70 | 15 | 904856 | 823825 | 1544553 | 2748242 | 356 | 15 | 1442 | 78 | 697 | 2139 |
| 320 | 171.10 | 16 | 914249 | 861923 | 1544758 | 2750084 | 343 | 16 | 1320 | 128 | 709 | 2028 |
| 321 | 171.10 | 17 | 923317 | 896785 | 1545096 | 2751957 | 377 | 17 | 1360 | 156 | 1216 | 2576 |
| 322 | 171.10 | 18 | 933269 | 932718 | 1545507 | 2755170 | 362 | 18 | 1326 | 104 | 1217 | 2542 |
| 323 | 290.50 | 19 | 942827 | 967740 | 1545782 | 2758384 | 368 | 19 | 1354 | 139 | 1287 | 2641 |
| 324 | 290.50 | 20 | 952540 | 1003522 | 1546150 | 2761783 | 342 | 20 | 1323 | 142 | 1545 | 2869 |
| 325 | 312.60 | 21 | 961567 | 1038483 | 1546525 | 2765866 | 341 | 21 | 1281 | 157 | 1058 | 2338 |
| 326 | 324.60 | 22 | 970577 | 1072315 | 1546941 | 2768661 | 327 | 22 | 1271 | 123 | 1162 | 2433 |
| 327 | 324.60 | 23 | 979212 | 1105906 | 1547267 | 2771730 | 322 | 23 | 1331 | 149 | 1211 | 2542 |
| 328 | 324.60 | 24 | 987720 | 1141065 | 1547660 | 2774929 | 307 | 24 | 1253 | 122 | 1211 | 2464 |
| 329 | 368.80 | 25 | 995825 | 1174162 | 1547983 | 2778128 | 288 | 25 | 1138 | 123 | 1285 | 2423 |
| 330 | 368.70 | 26 | 1003447 | 1204216 | 1548309 | 2781524 | 333 | 26 | 1026 | 146 | 1281 | 2307 |
| 331 | 371.50 | 27 | 1012237 | 1231316 | 1548694 | 2784909 | 393 | 27 | 1144 | 161 | 1265 | 2408 |
| 332 | 382.50 | 28 | 1022619 | 1261538 | 1549119 | 2788250 | 358 | 28 | 1119 | 152 | 1320 | 2439 |
| 333 | 382.50 | 29 | 1032087 | 1291109 | 1549521 | 2791738 | 368 | 29 | 1333 | 168 | 1320 | 2653 |
| 334 | 387.90 | 30 | 1041820 | 1326317 | 1549964 | 2795226 | 368 | 30 | 1333 | 168 | 1320 | 2653 |
| 335 | * | 1 | 1051553 | 1361525 | 1550407 | 2798714 | | 1 | | | | |

| STREAM | COMBINED | OWW | MV2 | MV3 | OUTFALL |
|---|---|---|---|---|---|
| MAXIMUM FLOW M3/DY | 1579.56 | 411.28 | 213.10 | 1545.42 | 2868.70 |
| MINIMUM FLOW M3/DY | 1025.74 | 274.68 | 75.32 | 658.97 | 1851.02 |
| AVERAGE FLOW M3/DY | 1254.96 | 346.64 | 140.56 | 1028.27 | 2283.23 |
| MAXIMUM FLOW GPM | 289.78 | 75.45 | 39.09 | 283.51 | 526.27 |
| MINIMUM FLOW GPM | 188.18 | 50.39 | 13.82 | 120.89 | 339.58 |
| AVERAGE FLOW GPM | 230.23 | 63.59 | 25.79 | 188.64 | 418.87 |
| TOTAL FLOW GALLONS | 9945778.7 | 2747157.9 | 1113985.6 | 8149263.2 | 18095042. |
| DAILY FLOW GALLONS | 320831.57 | 88617.997 | 35935.019 | 262879.45 | 583711.03 |

TOTAL FLOW TO CITY SEWER
********** GALLONS
3,861,144

| DATE | OWW BOD | OWW TSS | METER VAULT THREE PHOSPHATE | METER VAULT THREE pH | METER VAULT THREE TEMP | COMBINED DISCHARGE pH | COMBINED DISCHARGE TEMP |
|---|---|---|---|---|---|---|---|
| 2.00 | 400.00 | 126.00 | 0.10 | 4.90 | 17.40 | 6.30 | 18.10 |
| 9.00 | 433.00 | 164.00 | 0.10 | 5.30 | 18.20 | 6.70 | 17.40 |
| 16.00 | 278.00 | 228.00 | 0.10 | 5.70 | 13.40 | 7.10 | 16.20 |
| 30.00 | 253.00 | 164.00 | 0.10 | 5.20 | 11.90 | 6.60 | 16.30 |
| AVERAGE | 341.00 | 170.50 | 0.10 | 5.28 | 15.23 | 6.68 | 17.00 |

| DATE | LBS BOD IN OWW | | LBS TSS |
|---|---|---|---|
| 2.00 | 358.31 | | 112.87 |
| 9.00 | 345.95 | | 131.03 |
| 16.00 | 210.37 | | 172.54 |
| 30.00 | 205.50 | | 133.21 |
| 0.00 | 0.00 | | 0.00 |
| AVERAGE | 224.03 | AVERAGE | 109.93 |
| AVERAGE TOTAL LBS/MO | 8079.03 | | 4039.52 LBS/MO |

| DATE OF ANALYSIS | ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW PARAMETERS | BOD | TSS | CR 6+ | CR TOTAL | FLUORIDE |
|---|---|---|---|---|---|---|
| 2.00 | MG/L | 32.00 | 27.00 | 0.0010 | 0.0020 | 4.80 |
| OUTFALL | MG/L | 22.58 | 19.05 | 0.0007 | 0.0014 | 3.39 |
| | KG/DAY | 50.55 | 42.65 | 0.0016 | 0.0032 | 7.58 |
| | LBS/DAY | 111.43 | 94.02 | 0.0035 | 0.0070 | 16.72 |
| 9.00 | MG/L | 56.00 | 29.00 | 0.0010 | 0.0060 | 3.90 |
| OUTFALL | MG/L | 31.86 | 16.50 | 0.0006 | 0.0034 | 2.22 |
| | KG/DAY | 60.67 | 31.42 | 0.0011 | 0.0065 | 4.23 |
| | LBS/DAY | 133.76 | 69.27 | 0.0024 | 0.0143 | 9.32 |
| 16.00 | MG/L | 49.00 | 41.00 | 0.0010 | 0.0060 | 5.10 |
| OUTFALL | MG/L | 31.87 | 26.67 | 0.0007 | 0.0039 | 3.32 |
| | KG/D | 64.66 | 54.10 | 0.0013 | 0.0079 | 6.73 |
| | LBS/DAY | 142.54 | 119.27 | 0.0029 | 0.0175 | 14.84 |
| 30.00 | MG/L | 62.00 | 32.00 | 0.0010 | 0.0050 | 4.20 |
| OUTFALL | MG/L | 31.15 | 16.07 | 0.0005 | 0.0025 | 2.11 |
| | KG/DAY | 82.62 | 42.64 | 0.0013 | 0.0067 | 5.60 |
| | LBS/DAY | 182.15 | 94.01 | 0.0029 | 0.0147 | 12.34 |
| 5.00 | MG/L | | | | | |
| OUTFALL | MG/L | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | KG/DAY | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | LBS/DAY | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| AVERAGE | MG/L COMBI | 49.75 | 32.25 | 0.0010 | 0.0048 | 4.50 |
| | MG/L OUTFA | 29.36 | 19.57 | 0.0006 | 0.0028 | 2.76 |
| 4.00 | KG/DAY | 64.62 | 42.70 | 0.0013 | 0.0061 | 6.03 |
| | LBS/DAY | 142.47 | 94.14 | 0.0029 | 0.0134 | 13.30 |
| MAXIMUM | MG/L COMBI | 62.00 | 41.00 | 0.0010 | 0.0060 | 5.10 |
| | MG/L OUTFA | 31.87 | 26.67 | 0.0007 | 0.0039 | 3.39 |
| | KG/D | 82.62 | 54.10 | 0.0016 | 0.0079 | 7.58 |
| | LBS/DAY | 182.15 | 119.27 | 0.0035 | 0.0174 | 16.68 |
| MINIMUM | MG/L COMBI | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | MG/L OUTFA | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | KG/DAY | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | LBS/DAY | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | * | | | | | |

SCOEPA00035225

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION

DATE: 11/2/84

ANALYSTS: [signature] Nancy L.

FACILITIES OP. SUPR.

ENVIRONMENTAL ENGR.

FILE

| SAMPLE LOCATION | - | - | - | - | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | - | NPDES PARAMETER LIMITS | | | | | | | |
| Date 11-2-84 | - | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | - | 15 | 30 | ▲ 32 | + 400 | | | |
| TSS | mg/l | - | 15 | 30 | ▲ 27 | + 126 | | | |
| $F^-$ | mg/l | - | 6 | 20 | ▲ 4.8 | | | | |
| $Cr^{6+}$ | mg/l | - | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | - | 0.3 | 1 | ▲ 0.002 | | | | |
| Phosphates | mg/l | - | 2 | 5 | | | ▲ 0.1 | | |
| Free Avail. Chlorine | mg/l | - | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | - | 9 | | | ▲ 4.9 | ▲ 6.3 | |
| Temperature | °C | - | - | 27 | | | ▲ 17.4 | ▲ 18.1 | |
| Turbidity | NTU | - | - | - | | | | | |
| Conductivity | µmho's cm | - | - | - | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.

▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035226

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 11/9/84
ANALYSTS: [signature]

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 11-9-84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 56 | + 433 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 29 | + 164 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 3.9 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.006 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.3 | ▲ 6.7 | |
| Temperature | °C | – | – | 27 | | | ▲ 18.2 | ▲ 17.4 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035227

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 11/16/84
ANALYSTS: [signature]

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 11-16-84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 49 | + 278 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 41 | + 228 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 5.1 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ < 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.006 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.7 | ▲ 7.1 | |
| Temperature | °C | – | – | 27 | | | ▲ 13.4 | ▲ 16.2 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035228

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 11/30/84
ANALYSTS: [signature] Nancy L

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | - | - | - | - | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | - | NPDES PARAMETER LIMITS | | | | | | | |
| Date 11-30-84 | - | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | - | 15 | 30 | ▲ 62 | + 253 | | | |
| TSS | mg/l | - | 15 | 30 | ▲ 32 | + 164 | | | |
| $F^-$ | mg/l | - | 6 | 20 | ▲ 4.2 | | | | |
| $Cr^{6+}$ | mg/l | - | 0.02 | 0.05 | ▲ <0.001 | | | | |
| $Cr^{total}$ | mg/l | - | 0.3 | 1 | ▲ 0.005 | | | | |
| Phosphates | mg/l | - | 2 | 5 | | | ▲ 0.1 | | |
| Free Avail. Chlorine | mg/l | - | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | - | 9 | | | ▲ 5.2 | ▲ 6.6 | |
| Temperature | °C | - | - | 27 | | | ▲ 11.9 | ▲ 16.3 | |
| Turbidity | NTU | - | - | - | | | | | |
| Conductivity | µmho's cm | - | - | - | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035229

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location [illegible])

NAME [illegible]

ADDRESS [illegible]

FACILITY [illegible]

LOCATION [illegible] OR 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

# DISCHARGE MONITORING REPORT (DMR)

Form Approved No. 158-R0073

| (2-16) | (17-19) |
|---|---|
| OR-003058-7 | 54 |
| PERMIT NUMBER | DISCHARGE NUMBER |

2834-J
93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 10 | 01 | TO | 84 | 10 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater Flow MVI | SAMPLE MEASUREMENT | 325,000 | 386,000 | GPD | — | — | — | — | | cont. | totalizing |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | recorder |
| MVI BOD | SAMPLE MEASUREMENT | 91 | 118 | #/D | 26 | 37 | 56 | mg/l | 0 | 1/7 | 24 HC |
| | PERMIT REQUIREMENT | 120 | 240 | | — | 45 | 90 | | | | " |
| MVI TSS | SAMPLE MEASUREMENT | 91 | 116 | #/D | 22 | 35 | 40 | mg/l | | " | " |
| | PERMIT REQUIREMENT | 61 | 160 | | — | 23 | 60 | | | | |
| MVI Cr 6+ | SAMPLE MEASUREMENT | .0035 | .0049 | #/D | <.001 | .0015 | .002 | mg/l | | | |
| | PERMIT REQUIREMENT | .03 | [illegible] | | — | [illegible] | .05 | | | | |
| MVI Cr Total | SAMPLE MEASUREMENT | .013 | .019 | #/D | .003 | .005 | .007 | mg/l | | | |
| | PERMIT REQUIREMENT | 5 | 1.0 | | — | [illegible] | 1.0 | | | | |
| MVI Fluoride | SAMPLE MEASUREMENT | 10.8 | 15.1 | #/D | 3.3 | 4.2 | 5.2 | mg/l | | | " |
| | PERMIT REQUIREMENT | 21.4 | 47.7 | | — | [illegible] | 1.6 | | | | |
| MVI pH | SAMPLE MEASUREMENT | — | — | — | 2.8 | — | 9.8 | pH units | 0 | continuous | |
| | PERMIT REQUIREMENT | — | — | | 6.0 | [illegible] | 9.0 | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| J Pittman / Dir Eng | | [signature] | 503 | 243-2020 | 84 | 11 | 12 |
| TYPED OR PRINTED | | | AREA CODE | NUMBER | YEAR | MO | DAY |

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

pH compliance was recorded at WWTP due to pH meter problems at outfall. pH was in compliance 99.8 % of the time. Total time out of compliance was 92.4 min. No violations were longer than 60 minutes.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)



SCOEPA00035230

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if different)

NAME: [illegible] Split Rock Campground

ADDRESS: PO Box 93100 [illegible]

FACILITY: 727 [illegible] Split Rock Rd

LOCATION: Parker, SD 57025

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158-R0073

(2-16) PERMIT NUMBER: OE-0030B-7

(17-19) DISCHARGE NUMBER: 004

2834-J

93450

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 34 | 10 | 01 | TO | 84 | 10 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Toxic Organics (TTO) | SAMPLE MEASUREMENT | — | — | — | — | — | 2.64 | mg/L | | 2/mo | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 1.47 | | | | |
| Blowdown Flow MGD | SAMPLE MEASUREMENT | 207,000 | 304,000 | GPD | — | — | — | — | | 1/1 | Totalizing Reading |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| Total $PO_3^{\equiv}$ | SAMPLE MEASUREMENT | — | — | — | <.1 | <.1 | <.1 | mg/L | | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 5.12 | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Outfall Flow | SAMPLE MEASUREMENT | 657,000 | 532,000 | GPD | — | — | — | — | | 1/1 | Totalizing Reading |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| Outfall pH | SAMPLE MEASUREMENT | — | — | — | 6.6 | 7.0 | 7.4 | pH — SU | | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | | |
| Temp | SAMPLE MEASUREMENT | — | — | — | 12.4 | 12.9 | 18.3 | °C | | " | " |
| | PERMIT REQUIREMENT | — | — | | — | — | 29.4 | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | TELEPHONE | | | DATE | | |
|---|---|---|---|---|---|---|---|
| J. Hamm / Dir. Eng. | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years) | AREA CODE: 605 | NUMBER: 212-2022 | YEAR: 84 | MO: 11 | DAY: 12 |
| TYPED OR PRINTED | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Outfall pH was still by grab sample since sample pump did not run for 6 months

EPA FORM 3320-1 (REVISED 2-83) PREVIOUS EDITIONS MAY BE USED. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PAGE 2 OF 2

SCOEPA00035231

DATE 10/9/84

**WACKER**

ANALYST(S) Elinor Lenz

~~Analyzed 10/8/84~~

**SPECIAL TEST REPORT: INCOMING INSPECTION**

**TEST METHOD DESCRIPTION:**

Process Wastewater Sampled 10/5/84 ~ 1:30 PM

Organic Wastewater Sampled 10/5/84 ~ 1:31 PM

Analyze for TCE and FreonTF

**RESULTS:**

| | TCE, PPM | FreonTF, PPM |
|---|---|---|
| Process Wastewater | 0.22 | 1.92 |
| Organic Wastewater | 2.24 | 1.40 |

COPIES SENT TO Greg Carr

Form # 107-016

SCOEPA00035232

DATE 10/7/84

**WACKER**

ANALYST(S) Eleen Levin
analyzed 10/8/84

**SPECIAL TEST REPORT: INCOMING INSPECTION**

**TEST METHOD DESCRIPTION:**

From TF to machines water overflow — Water From Dryer (in Acid Etch Room) to drain

10/3/84 Greg Carr

(Drain Effluent from water overflow alone.)

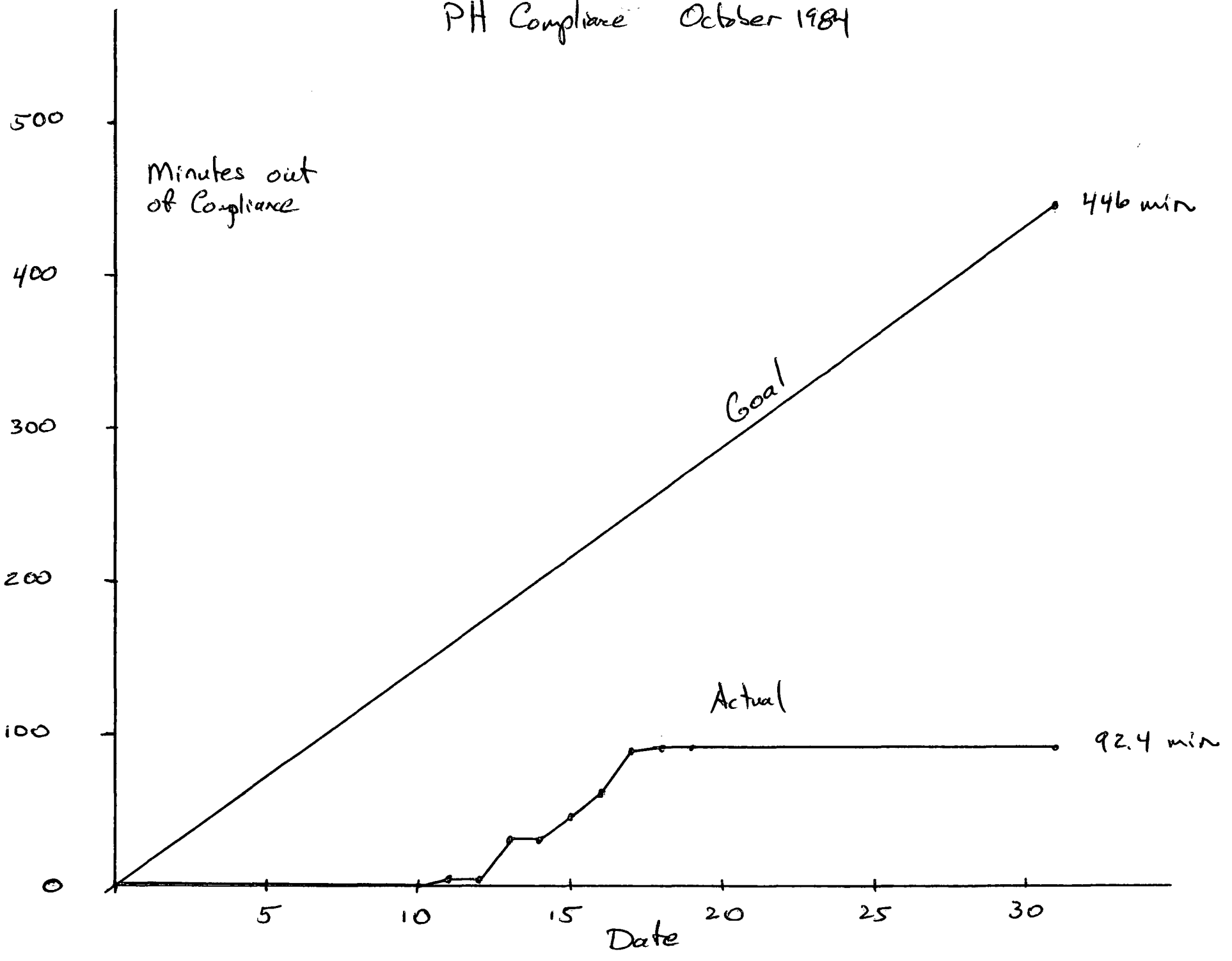
**RESULTS:**

From TF = 43 PPM

The sample was pulled of the water overflow alone to determine amount of Freon going into drain.

COPIES SENT TO Greg Carr
Form # 107-016

SCOEPA00035233


PH Compliance October 1984
500
400
300
200
100
0
Minutes out of Compliance
446 min
Goal
Actual
92.4 min
5
10
15
20
25
30
Date

wtp1084 TIME OUT PRINT TO M12

| Y OF YR | OF pH | DY OF MO | DWW TOT | COMB TOT | MV2 TOT | MV3 TOT | DWW FLOW | COMB FLOW | MV2 FLOW | MV3 FLOW | OUTFALL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 275 | 6.0 - 9.0 | 1 | 513080 | 358468 | 1518121 | 2653012 | 349 | 1 | 1140 | 252 | 763 | 1904 |
| 276 | 0 | 2 | 522296 | 388620 | 1518786 | 2655029 | 300 | 2 | 1209 | 282 | 748 | 1957 |
| 277 | 0 | 3 | 530224 | 420558 | 1519531 | 2657005 | 228 | 3 | 1212 | 262 | 783 | 1995 |
| 278 | 1.1 | 4 | 536252 | 452567 | 1520222 | 2659074 | 238 | 4 | 1072 | 265 | 736 | 1808 |
| 279 | 1.1 | 5 | 542533 | 480893 | 1520923 | 2661019 | 231 | 5 | 960 | 266 | 727 | 1688 |
| 280 | 1.1 | 6 | 548640 | 506264 | 1521625 | 2662941 | 323 | 6 | 1187 | 257 | 749 | 1936 |
| 281 | 1.1 | 7 | 557180 | 537627 | 1522304 | 2664919 | 255 | 7 | 1058 | 263 | 707 | 1765 |
| 282 | 1.1 | 8 | 563908 | 565581 | 1523000 | 2666786 | 262 | 8 | 1298 | 291 | 706 | 2003 |
| 283 | 1.1 | 9 | 570841 | 599863 | 1523769 | 2668651 | 265 | 9 | 1210 | 314 | 783 | 1993 |
| 284 | 1.3 | 10 | 577842 | 631831 | 1524598 | 2670720 | 216 | 10 | 1086 | 280 | 800 | 1886 |
| 285 | 5.3 | 11 | 583555 | 660529 | 1525339 | 2672833 | 266 | 11 | 1183 | 285 | 656 | 1839 |
| 286 | 5.3 | 12 | 590585 | 691787 | 1526093 | 2674565 | 292 | 12 | 1109 | 304 | 785 | 1894 |
| 287 | 30.6 | 13 | 598304 | 721074 | 1526896 | 2676639 | 289 | 13 | 1254 | 259 | 740 | 1995 |
| 288 | 30.6 | 14 | 605947 | 754211 | 1527580 | 2678595 | 314 | 14 | 1246 | 254 | 940 | 2186 |
| 289 | 46 | 15 | 614232 | 787138 | 1528251 | 2681079 | 346 | 15 | 1340 | 321 | 669 | 2009 |
| 290 | 61 | 16 | 623382 | 822547 | 1529100 | 2682846 | 327 | 16 | 1356 | 274 | 770 | 2126 |
| 291 | 85.9 | 17 | 632026 | 858368 | 1529825 | 2684880 | 343 | 17 | 1259 | 310 | 830 | 2088 |
| 292 | 89.1 | 18 | 641100 | 891624 | 1530644 | 2687072 | 304 | 18 | 1229 | 318 | 835 | 2063 |
| 293 | 89.1 | 19 | 649124 | 924091 | 1531483 | 2689277 | 303 | 19 | 1323 | 314 | 835 | 2159 |
| 294 | 92.4 | 20 | 657140 | 959054 | 1532312 | 2691484 | 363 | 20 | 1220 | 327 | 802 | 2022 |
| 295 | 92.4 | 21 | 666737 | 991296 | 1533175 | 2693603 | 362 | 21 | 1174 | 344 | 748 | 1922 |
| 296 | 92.4 | 22 | 676288 | 1022311 | 1534084 | 2695580 | 263 | 22 | 1201 | 300 | 820 | 2021 |
| 297 | 92.4 | 23 | 683226 | 1054035 | 1534877 | 2697747 | 263 | 23 | 1335 | 348 | 1149 | 2483 |
| 298 | 92.4 | 24 | 690163 | 1089299 | 1535796 | 2700782 | 324 | 24 | 1446 | 179 | 500 | 1947 |
| 299 | 92.4 | 25 | 698716 | 1127513 | 1536269 | 2702104 | 321 | 25 | 1246 | 160 | 786 | 2032 |
| 300 | 92.4 | 26 | 707188 | 1160437 | 1536691 | 2704181 | 356 | 26 | 1254 | 170 | 856 | 2110 |
| 301 | 92.4 | 27 | 716596 | 1193569 | 1537139 | 2706442 | 366 | 27 | 1161 | 152 | 833 | 1994 |
| 302 | 92.4 | 28 | 726267 | 1224248 | 1537540 | 2708642 | 359 | 28 | 1273 | 173 | 847 | 2121 |
| 303 | 92.4 | 29 | 735750 | 1257885 | 1537996 | 2710881 | 365 | 29 | 1259 | 127 | 737 | 1995 |
| 304 | 92.4 | 30 | 745388 | 1291140 | 1538332 | 2712827 | 655 | 30 | 1460 | 169 | 819 | 2279 |
| 305 | 92.4 | 31 | 762695 | 1329710 | 1538778 | 2714992 | 648 | 31 | 1406 | 185 | 841 | 2246 |
| 306 | 92.4 | | 779809 | 1366845 | 1539266 | 2717213 | | 1 | | | | |

| STREAM | COMBINED | DWW | MV2 | MV3 | OUTFALL |
|---|---|---|---|---|---|
| MAXIMUM FLOW M3/DY | 1460 | 655 | 348 | 1149 | 2483 |
| MINIMUM FLOW M3/DY | 969 | 216 | 127 | 500 | 1688 |
| AVERAGE FLOW M3/DY | 1231 | 326 | 258 | 784 | 2015 |
| MAXIMUM FLOW GPM | 268 | 120 | 64 | 211 | 456 |
| MINIMUM FLOW GPM | 176 | 40 | 23 | 92 | 310 |
| AVERAGE FLOW GPM | 226 | 60 | 47 | 144 | 370 |
| TOTAL FLOW GALLONS | 10082535 | 2667016 | 2114283 | 6419441 | 16501976 |
| DAILY FLOW GALLONS | 325243 | 86033 | 68203 | 207079 | 532322 |

TOTAL FLOW TO CITY SEWER
4781299 GALLONS

| DATE | DWW | | METER VAULT THREE | | | COMBINED DISCHARGE | |
|---|---|---|---|---|---|---|---|
| | BOD | TSS | PHOSPHATE | pH | TEMP | pH | TEMP |
| 5 | 433 | 392 | 0.1 | 5.9 | 19.2 | 6.7 | 18.3 |
| 12 | 337 | 308 | 0.1 | 6.1 | 18.7 | 7.4 | 17.6 |
| 19 | 283 | 360 | 0.1 | 6.3 | 18.4 | 7.2 | 17.6 |
| 26 | 357 | 330 | 0.1 | 5.8 | 18.1 | 6.6 | 17.4 |
| AVERAGE | 352.5 | 347.5 | 0.1 | 6 | 18.6 | 6.975 | 17.725 |

SCOEPA00035235

| DATE | LBS BOD IN DWW | | LBS TSS |
|---|---|---|---|
| 5 | 221 | | 200 |
| 12 | 217 | | 198 |
| 19 | 189 | | 241 |
| 26 | 280 | | 259 |
| 0 | 0 | | 0 |
| AVERAGE | 227 | AVERAGE | 225 |
| AVERAGE TOTAL LBS/MO | 7846 | | 7735 LBS/MO |

OF ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW

| YSIS PARAMETERS | * | BOD | TSS | CR 6+ | CR TOTAL | FLUORIDE |
|---|---|---|---|---|---|---|
| 5 MG/L | * | 56 | 40 | 0.002 | 0.0035 | 4.7 |
| ALL MG/L | * | 31.862393 | 22.758852 | 0.0011379 | 0.0019913 | 2.6741651 |
| KG/DAY | * | 53.776532 | 38.411809 | 0.0019205 | 0.0033610 | 4.5133875 |
| LBS/DAY | | 118.55574 | 84.682674 | 0.0042341 | 0.0074097 | 9.9502142 |
| 12 MG/L | * | 26 | 22 | 0.002 | 0.003 | 3.6 |
| ALL MG/L | * | 15.221020 | 12.879325 | 0.0011708 | 0.0017562 | 2.1075259 |
| KG/DAY | * | 28.821423 | 24.387358 | 0.0022170 | 0.0033255 | 3.9906585 |
| LBS/DAY | | 63.539709 | 53.764369 | 0.0048876 | 0.0073315 | 8.7978059 |
| 19 MG/L | * | 39 | 40 | 0.001 | 0.006 | 5.2 |
| ALL MG/L | * | 23.91 | 24.52 | 0.0006 | 0.0037 | 3.19 |
| KG/D | * | 51.61 | 52.93 | 0.0013 | 0.0079 | 6.88 |
| LBS/DAY | | 113.78 | 116.70 | 0.0029 | 0.0175 | 15.17 |
| 26 MG/L | * | 25.00 | 39.00 | 0.0010 | 0.0070 | 3.30 |
| ALL MG/L | * | 14.86 | 23.18 | 0.0006 | 0.0042 | 1.96 |
| KG/DAY | * | 31.35 | 48.91 | 0.0013 | 0.0088 | 4.14 |
| LBS/DAY | | 69.12 | 107.82 | 0.0028 | 0.0194 | 9.12 |
| 5 MG/L | * | | | | | |
| ALL MG/L | * | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| KG/DAY | * | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| LBS/DAY | | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| AGE MG/L COMBINED | | 36.50 | 35.25 | 0.0015 | 0.0049 | 4.20 |
| MG/L OUTFALL | | 21.46 | 20.84 | 0.0009 | 0.0029 | 2.48 |
| 4 KG/DAY | * | 41.39 | 41.16 | 0.0017 | 0.0059 | 4.88 |
| LBS/DAY | | 91.25 | 90.74 | 0.0037 | 0.0129 | 10.76 |
| UM MG/L COMBINED | | 56.00 | 40.00 | 0.0020 | 0.0070 | 5.20 |
| MG/L OUTFALL | | 31.86 | 24.52 | 0.0012 | 0.0042 | 3.19 |
| KG/D | * | 53.78 | 52.93 | 0.0022 | 0.0088 | 6.88 |
| LBS/DAY | | 118.31 | 116.46 | 0.0049 | 0.0193 | 15.14 |
| UM MG/L COMBINED | | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| MG/L OUTFALL | | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| KG/DAY | * | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| LBS/DAY | | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.00 |
| | * | | | | | |

SCOEPA00035236

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 10/5/84
ANALYSTS: Howard Hogle / Nancy Lee / Glenn Lewis

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 10-5-84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲- 56 | + 433 | | | |
| TSS | mg/l | – | 15 | 30 | ▲- 40 | + 392 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲- 4.7 | | | | |
| DUPLICATE 6 + Cr RUNS | mg/l | – | 0.02 | 0.05 | ▲- 0.002<br>0.002 | | | | |
| Cr total DUPLICATE RUNS | mg/l | – | 0.3 | 1 | ▲- 0.004<br>0.003 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ < 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.8 | ▲ 6.7 | |
| Temperature | °C | – | – | 27 | | | ▲ 19.2 | ▲ 18.3 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

Cr III Two runs i.e. ~~one~~ two different samples. // 6 measurements / sample

Cr TOT Two runs i.e. two different samples // 9 measurements / sample

SCOEPA00035237

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 10/12/84
ANALYSTS: [illegible] HAROLD HOGLE / [illegible] / [illegible]

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 10-12-84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲- 26 | + 337 | | | |
| TSS | mg/l | – | 15 | 30 | ▲- 22 | + 308 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲- 3.6 | | | | |
| $Cr^{6+}$ DUPLICATE RUNS | mg/l | – | 0.02 | 0.05 | ▲- 0.002<br>0.002 | | | | |
| $Cr^{total}$ DUPLICATE RUNS | mg/l | – | 0.3 | 1 | ▲- 0.002<br>0.004 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ < 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 6.1 | ▲ 7.4 | |
| Temperature | °C | – | – | 27 | | | ▲ 18.7 | ▲ 17.6 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS SAME AS 10/5/84

$Cr^{VI}$ Two runs – one on each of the two samples 6 measurements/sam

$Cr^{TOTAL}$ " " " " " " " " " 9 " " "

SCOEPA00035238

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 10/19/84
ANALYSTS: [illegible] / [illegible] / [illegible]

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | - | - | - | - | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | - | NPDES PARAMETER LIMITS | | | | | | | |
| Date | - | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | - | 15 | 30 | ▲ 39 | + 283 | | | |
| TSS | mg/l | - | 15 | 30 | ▲ 40 | + 360 | | | |
| $F^-$ | mg/l | - | 6 | 20 | ▲ 5.2 | | | | |
| $Cr^{6+}$ DUPLICATE RUNS | mg/l | - | 0.02 | 0.05 | ▲ .001 .001 | | | | |
| $Cr^{total}$ DUPLICATE RUNS | mg/l | - | 0.3 | 1 | ▲ .006 .006 | | | | |
| Phosphates | mg/l | - | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | - | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | - | 9 | | | ▲ 6.3 | ▲ 7.2 | |
| Temperature | °C | - | - | 27 | | | ▲ 18.4 | ▲ 17.6 | |
| Turbidity | NTU | - | - | - | | | | | |
| Conductivity | µmho's cm | - | - | - | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035239

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 10/26/84
ANALYSTS: [illegible] / [illegible] / [illegible]

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | - | - | - | - | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | - | NPDES PARAMETER LIMITS | | | | | | | |
| Date 10-26-84 | - | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | - | 15 | 30 | ▲ 25 | + 357 | | | |
| TSS | mg/l | - | 15 | 30 | ▲ 39 | + 330 | | | |
| $F^-$ | mg/l | - | 6 | 20 | ▲ 3.3 | | | | |
| $Cr^{6+}$ DUPLICATE RUNS | mg/l | - | 0.02 | 0.05 | ▲ <.001 <.001 | | | | |
| $Cr^{total}$ DUPLICATE RUNS | mg/l | - | 0.3 | 1 | ▲ .004 .009 | | | | |
| Phosphates | mg/l | - | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | - | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | - | 9 | | | ▲ 5.8 | ▲ 6.6 | |
| Temperature | °C | - | - | 27 | | | ▲ 18.1 | ▲ 17.4 | |
| Turbidity | NTU | - | - | - | | | | | |
| Conductivity | µmho's cm | - | - | - | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035240

Greg Carr

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location/ Department)

NAME [illegible]
ADDRESS [illegible]
FACILITY [illegible]
LOCATION [illegible]

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

# DISCHARGE MONITORING REPORT (DMR)

Form Approved No. 158-R0073

2834-J
93450

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR-0030587 | 53 |

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 81 | 09 | 01 | TO | 81 | 09 | 30 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROCESS WASTEWATER FLOW - MVI | SAMPLE MEASUREMENT | 296000 | 412000 | GPD | — | — | — | — | | CONT. | TOTALIZING |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | — | RECORDER |
| MVI BOD | SAMPLE MEASUREMENT | 124 | 159 | #/D | — | 53 | 65 | mg/L | | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 120 | 240 | | — | 45 | 90 | | | " | " |
| TSS | SAMPLE MEASUREMENT | 132 | 160 | #/D | — | 56 | 66 | mg/L | | " | " |
| | PERMIT REQUIREMENT | 61 | 160 | | — | 23 | 60 | | | " | " |
| Cr Gt | SAMPLE MEASUREMENT | .002 | .002 | #/D | — | .001 | .001 | mg/L | | " | " |
| | PERMIT REQUIREMENT | .03 | .1 | | — | .02 | .05 | | | " | " |
| Cr TOTAL | SAMPLE MEASUREMENT | .006 | .009 | #/D | — | .0025 | .004 | mg/L | | " | " |
| | PERMIT REQUIREMENT | .5 | 1.0 | | — | .3 | 1.0 | | | " | " |
| FLUORIDE | SAMPLE MEASUREMENT | 9.3 | 11.9 | #/D | — | 4.0 | 4.9 | mg/L | | " | " |
| | PERMIT REQUIREMENT | 21.4 | 42.7 | | — | 8 | 16 | | | " | " |
| PH | SAMPLE MEASUREMENT | — | — | — | 2.1 | — | 12.1 | PH units | 0 | CONTINUOUS | |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | RECORDER | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE AREA CODE | NUMBER | DATE YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| J. PITTMAN, DIR. ENG. | | John Pittman | 503 | 243-2020 | 84 | 10 | 10 |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PH WAS WITHIN COMPLIANCE 99.5% OF THE TIME. TOTAL TIME OUT OF COMPLIANCE WAS 224 min. NO VIOLATIONS WERE LONGER THAN 60 min.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE OF

SCOEPA00035242

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location Street)

NAME WAGNER SILTRONIC CORP.
ADDRESS PO BOX 83180
PORTLAND, OR 97203
FACILITY 7200 N.W. FRONT AVE.
LOCATION PORTLAND, OR 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved No. 158-R0073

2834-J
93450

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR-003058-7 | 53 |

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 09 | 01 | TO | 84 | 09 | 30 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL TOXIC ORGANICS | SAMPLE MEASUREMENT | — | — | — | — | — | 2.01 | mg/L | | 1/mo | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | — | 1.47 | | | " | " |
| BLOW DOWN FLOW MV 3 | SAMPLE MEASUREMENT | 187000 | 245000 | GPD | — | — | — | — | | 1/1 | TOTALIZING RECORDER |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| TOTAL $PO_3^{\equiv}$ | SAMPLE MEASUREMENT | — | — | | | .58 | 2.0 | mg/L | | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 3.0 | | | " | " |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| OUTFALL FLOW | SAMPLE MEASUREMENT | 483000 | 622000 | GPD | — | — | — | — | | 1/1 | TOTALIZING RECORDER |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| PH | SAMPLE MEASUREMENT | — | — | — | 6.7 | 7.2 | 7.6 | PH UNITS | | 1/7 | GRAB |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | " | " |
| TEMP | SAMPLE MEASUREMENT | — | — | — | — | 20.5 | 21.6 | °C | | " | " |
| | PERMIT REQUIREMENT | — | — | | — | — | 29.4 | | | " | " |

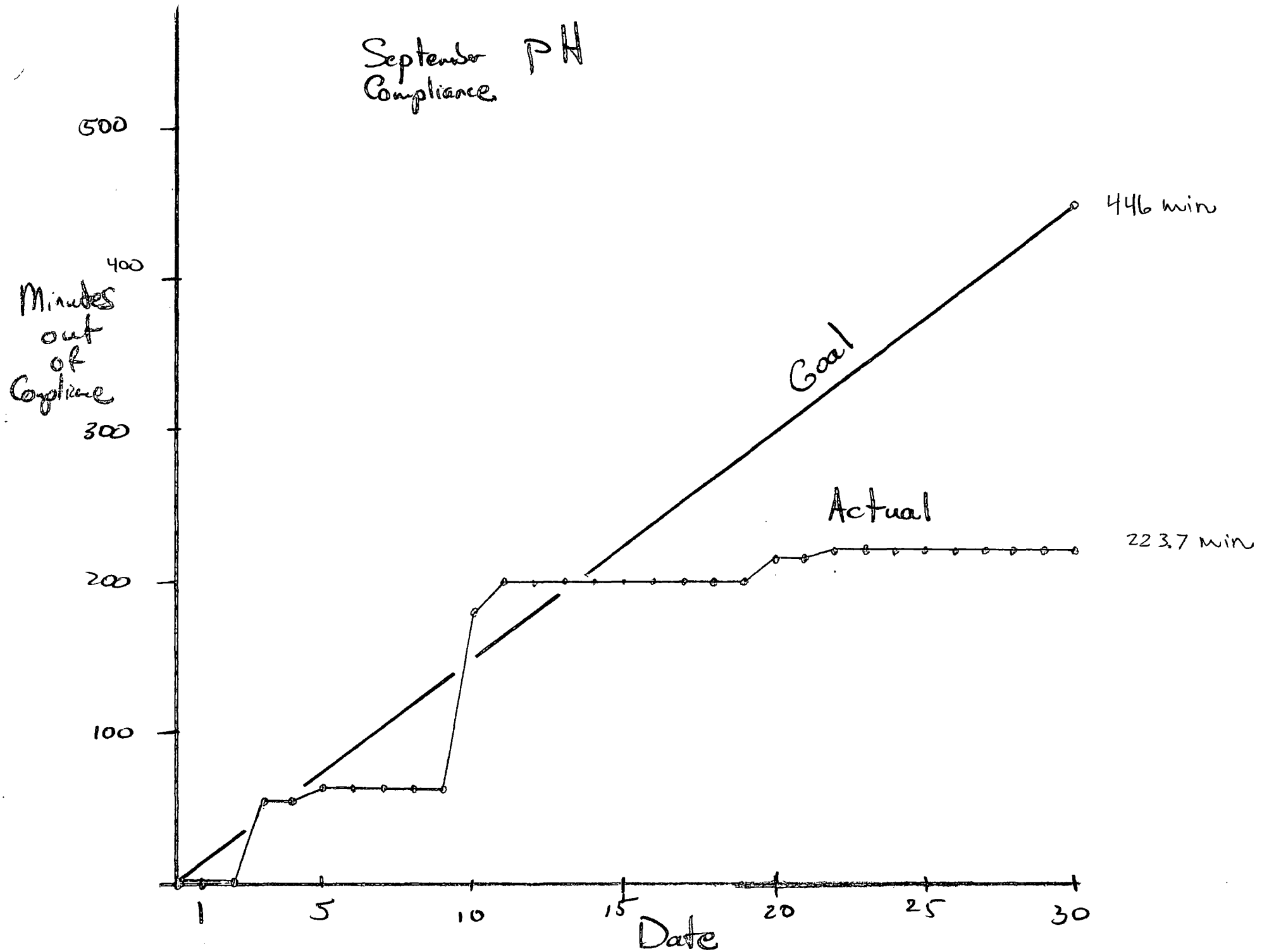
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE AREA CODE | NUMBER | DATE YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| J. PITTMAN DIR. ENG. | | | 503 | 243-2020 | 84 | 10 | 10 |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

TIO WAS [illegible] T FROM IN THE EFFLUENT

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE OF

SCOEPA00035243


September PH
Compliance
500
400
300
200
100
Minutes out of Compliance
446 min
Goal
Actual
223.7 min
1
5
10
15
20
25
30
Date

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 9-28-84
ANALYSTS: N. Lao. [illegible]

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 9/28/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲- 37 | + 210 | | | |
| TSS | mg/l | – | 15 | 30 | ▲- 66 | + 230 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲- 3.1 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲- < .001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲- .002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 2.0 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 6.6 | ▲ 7.3 | |
| Temperature | °C | – | – | 27 | | | ▲ 21.6 | ▲ 19.2 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS DEQ Split

51
49
100
3/169

56

SCOEPA00035245

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 9-21-84
ANALYSTS: N. Lozo. Howard Hyde

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | | | | | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | - | NPDES PARAMETER LIMITS | | | | | | | |
| Date 9/21/84 | - | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | - | 15 | 30 | ▲ 58 | + 542 | | | |
| TSS | mg/l | - | 15 | 30 | ▲ 49 | + 442 | | | |
| $F^-$ | mg/l | - | 6 | 20 | ▲ 3.3 | | | | |
| $Cr^{6+}$ | mg/l | - | 0.02 | 0.05 | ▲ < .001 | | | | |
| $Cr^{total}$ | mg/l | - | 0.3 | 1 | ▲ .004 | | | | |
| Phosphates | mg/l | - | 2 | 5 | | | ▲ 0.1 | | |
| Free Avail. Chlorine | mg/l | - | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | - | 9 | | | ▲ 5.8 | ▲ 6.7 | |
| Temperature | °C | - | - | 27 | | | ▲ 20.4 | ▲ 21.3 | |
| Turbidity | NTU | - | - | - | | | | | |
| Conductivity | µmho's cm | - | - | - | | | | | |
| | | | | | | | | | |
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▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035246

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 9-13-84
ANALYSTS: N. Lara [signature]

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR
FILE

| SAMPLE LOCATION | - | - | - | - | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | - | NPDES PARAMETER LIMITS | | | | | | | |
| Date 9/13/84 | - | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | - | 15 | 30 | ▲ 52 | + 453 | | | |
| TSS | mg/l | - | 15 | 30 | ▲ 54 | + 436 | | | |
| $F^-$ | mg/l | - | 6 | 20 | ▲ 4.6 | | | | |
| $Cr^{6+}$ | mg/l | - | 0.02 | 0.05 | ▲ .001 | | | | |
| $Cr^{total}$ | mg/l | - | 0.3 | 1 | ▲ .002 | | | | |
| Phosphates | mg/l | - | 2 | 5 | | | ▲ 0.1 | | |
| Free Avail. Chlorine | mg/l | - | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | - | 9 | | | ▲ 6.1 | ▲ 7.3 | |
| Temperature | °C | - | - | 27 | | | ▲ 20.7 | ▲ 19.7 | |
| Turbidity | NTU | - | - | - | | | | | |
| Conductivity | µmho's cm | - | - | - | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035247

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 9/7/84
ANALYSTS: N. Lee

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 9/7/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 65 | + 205 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 424 | + 106 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.9 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.8 | ▲ 7.6 | |
| Temperature | °C | – | – | 27 | | | ▲ 20.4 | ▲ 21.6 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035248

Grey Carr

DWTP984 TIME OUT PRINT TO M124

| DY OF YR | OF pH | DY OF MO | OWW TOT | COMB TOT | MV2 TOT | MV3 TOT |
|---|---|---|---|---|---|---|
| 245.00 | 6.0 - 9.0 | 1 | 288424 | 441704 | 1497596 | 2595004 |
| 246 | 0.00 | 2 | 296336 | 472704 | 1498249 | 2597254 |
| 247 | 54.60 | 3 | 303215 | 506955 | 1498896 | 2598995 |
| 248 | 54.80 | 4 | 308902 | 540850 | 1499495 | 2600782 |
| 249 | 63.70 | 5 | 314666 | 571320 | 1500121 | 2602521 |
| 250 | 63.70 | 6 | 319866 | 596665 | 1500733 | 2604266 |
| 251 | 63.70 | 7 | 326771 | 630707 | 1501418 | 2606638 |
| 252 | 63.70 | 8 | 333601 | 659971 | 1502131 | 2607927 |
| 253 | 63.70 | 9 | 340659 | 690180 | 1502834 | 2609567 |
| 254 | 180.10 | 10 | 347690 | 720150 | 1503506 | 2611944 |
| 255 | 200.10 | 11 | 354852 | 752735 | 1504186 | 2613871 |
| 256 | 200.10 | 12 | 361919 | 793898 | 1504852 | 2615987 |
| 257 | 200.10 | 13 | 368914 | 821235 | 1505472 | 2617948 |
| 258 | 200.10 | 14 | 375373 | 847986 | 1506211 | 2619910 |
| 259 | 200.10 | 15 | 384491 | 886804 | 1506853 | 2621857 |
| 260 | 200.10 | 16 | 391649 | 917132 | 1507502 | 2623827 |
| 261 | 200.10 | 17 | 399277 | 949133 | 1508175 | 2625754 |
| 262 | 200.10 | 18 | 406195 | 984743 | 1508836 | 2627831 |
| 263 | 202.80 | 19 | 412917 | 1017621 | 1509496 | 2629629 |
| 264 | 216.90 | 20 | 420281 | 1050452 | 1510203 | 2631444 |
| 265 | 216.90 | 21 | 428243 | 1083360 | 1510969 | 2633404 |
| 266 | 221.10 | 22 | 434983 | 1110821 | 1511639 | 2635858 |
| 267 | 221.10 | 23 | 442335 | 1136633 | 1512283 | 2637164 |
| 268 | 223.70 | 24 | 451776 | 1161780 | 1513059 | 2639100 |
| 269 | 223.70 | 25 | 460676 | 1191517 | 1513840 | 2641212 |
| 270 | 223.60 | 26 | 468004 | 1215458 | 1514500 | 2643325 |
| 271 | 223.60 | 27 | 476270 | 1244024 | 1515194 | 2644960 |
| 272 | 223.60 | 28 | 485579 | 1274761 | 1515993 | 2647021 |
| 273 | 223.70 | 29 | 494511 | 1303770 | 1516745 | 2649217 |
| 274 | 223.70 | 30 | 504235 | 1332210 | 1517475 | 2651414 |
| 275 | * | 1 | 513080 | 1358488 | 1518121 | 2653012 |

| STREAM | COMBINED | OWW | MV2 | MV3 | OUTFALL |
|---|---|---|---|---|---|
| MAXIMUM FLOW M3/DY | 1558.02 | 368.05 | 302.42 | 928.84 | 2358.93 |
| MINIMUM FLOW M3/DY | 906.17 | 196.82 | 226.72 | 487.89 | 1471.31 |
| AVERAGE FLOW M3/DY | 1156.68 | 283.44 | 258.96 | 731.87 | 1888.55 |
| MAXIMUM FLOW GPM | 285.82 | 67.52 | 55.48 | 170.40 | 432.75 |
| MINIMUM FLOW GPM | 166.24 | 36.11 | 41.59 | 89.50 | 269.92 |
| AVERAGE FLOW GPM | 212.20 | 52.00 | 47.51 | 134.26 | 346.46 |
| TOTAL FLOW GALLONS | 9166898.7 | 2246329.3 | 2052289.2 | 5800204.4 | 14967103. |
| DAILY FLOW GALLONS | 295706.41 | 72462.236 | 66202.879 | 187103.36 | 482809.77 |

| DATE | OWW BOD | OWW TSS | METER VAULT THREE PHOSPHATE | pH | TEMP |
|---|---|---|---|---|---|
| 7.00 | 205.00 | 106.00 | 0.10 | 5.80 | 20.40 |
| 13.00 | 453.00 | 436.00 | 0.10 | 6.10 | 20.70 |
| 21.00 | 542.00 | 442.00 | 0.10 | 5.80 | 20.40 |
| 28.00 | 210.00 | 230.00 | 2.00 | 6.60 | 21.60 |
| AVERAGE | 352.50 | 303.50 | 0.58 | 6.08 | 20.78 |

| DATE | LBS BOD IN OWW | LBS TSS |
|---|---|---|
| 7 | 120.75 | 62.43 |

SCOEPA00035250

| OWW FLOW | | COMB FLOW | MV2 FLOW | MV3 FLOW | OUTFALL |
|---|---|---|---|---|---|
| 299 | 1 | 1173 | 247 | 852 | 2025 |
| 260 | 2 | 1296 | 245 | 659 | 1955 |
| 215 | 3 | 1283 | 227 | 676 | 1959 |
| 218 | 4 | 1153 | 237 | 658 | 1812 |
| 197 | 5 | 959 | 232 | 660 | 1620 |
| 261 | 6 | 1288 | 259 | 898 | 2186 |
| 259 | 7 | 1108 | 270 | 488 | 1596 |
| 267 | 8 | 1143 | 266 | 621 | 1764 |
| 266 | 9 | 1134 | 254 | 900 | 2034 |
| 271 | 10 | 1233 | 257 | 729 | 1963 |
| 267 | 11 | 1558 | 252 | 801 | 2359 |
| 265 | 12 | 1035 | 235 | 742 | 1777 |
| 244 | 13 | 1013 | 280 | 743 | 1755 |
| 345 | 14 | 1469 | 243 | 737 | 2206 |
| 271 | 15 | 1148 | 246 | 746 | 1894 |
| 289 | 16 | 1211 | 255 | 729 | 1941 |
| 262 | 17 | 1348 | 250 | 786 | 2134 |
| 254 | 18 | 1244 | 250 | 681 | 1925 |
| 279 | 19 | 1243 | 268 | 687 | 1930 |
| 301 | 20 | 1246 | 290 | 742 | 1987 |
| 255 | 21 | 1039 | 254 | 929 | 1968 |
| 278 | 22 | 977 | 244 | 494 | 1471 |
| 357 | 23 | 952 | 294 | 733 | 1685 |
| 337 | 24 | 1126 | 296 | 799 | 1925 |
| 277 | 25 | 906 | 250 | 800 | 1706 |
| 313 | 26 | 1081 | 263 | 619 | 1700 |
| 352 | 27 | 1163 | 302 | 780 | 1943 |
| 338 | 28 | 1098 | 285 | 831 | 1929 |
| 368 | 29 | 1076 | 276 | 832 | 1908 |
| 335 | 30 | 995 | 245 | 605 | 1599 |
| | 1 | | | | |

TOTAL FLOW TO CITY SEWER
4298619 GALLONS

COMBINED DISCHARGE

| pH | TEMP |
|---|---|
| 7.60 | 21.60 |
| 7.30 | 19.70 |
| 6.70 | 21.30 |
| 7.30 | 19.20 |
| 7.23 | 20.45 |

| | | | | | |
|---|---|---|---|---|---|
| | 13 | 244.17 | | 235.01 | |
| | 21 | 304.86 | | 248.61 | |
| | 28 | 156.53 | | 171.44 | |
| | 0 | 0.00 | | 0.00 | |
| AVERAGE | | 165.26 | AVERAGE | 143.50 | |
| AVERAGE TOTAL LBS/MO | | 6828.95 | | | 5879.68 |

"$LEFT†  "$DOWN†

"$RIGHT†  "$UP†

| DATE OF ANALYSIS | ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW PARAMETERS | ¶ | BOD | ¶ | TSS | ¶ |
|---|---|---|---|---|---|---|
| 7.00 | MG/L | ¶ | 65.00 | ¶ | 56.00 | ¶ |
| OUTFALL | MG/L | ¶ | 45.12 | ¶ | 38.88 | ¶ |
| | KG/DAY | ¶ | 72.00 | ¶ | 62.03 | ¶ |
| | LBS/DAY | ¶ | 158.72 | ¶ | 136.75 | ¶ |
| 13.00 | MG/L | ¶ | 52.00 | ¶ | 54.00 | ¶ |
| OUTFALL | MG/L | ¶ | 30.00 | ¶ | 31.15 | ¶ |
| | KG/DAY | ¶ | 52.65 | ¶ | 54.68 | ¶ |
| | LBS/DAY | ¶ | 116.08 | ¶ | 120.54 | ¶ |
| 21.00 | MG/L | ¶ | 58.00 | ¶ | 49.00 | ¶ |
| OUTFALL | MG/L | ¶ | 30.63 | ¶ | 25.88 | ¶ |
| | KG/D | ¶ | 60.29 | ¶ | 50.93 | ¶ |
| | LBS/DAY | ¶ | 132.91 | ¶ | 112.28 | ¶ |
| 28.00 | MG/L | ¶ | 37.00 | ¶ | 66.00 | ¶ |
| OUTFALL | MG/L | ¶ | 21.06 | ¶ | 37.56 | ¶ |
| | KG/DAY | ¶ | 40.63 | ¶ | 72.47 | ¶ |
| | LBS/DAY | ¶ | 89.56 | ¶ | 159.76 | ¶ |
| 5.00 | MG/L | ¶ | | ¶ | | ¶ |
| OUTFALL | MG/L | ¶ | 0.00 | ¶ | 0.00 | ¶ |
| | KG/DAY | ¶ | 0.00 | ¶ | 0.00 | ¶ |
| | LBS/DAY | ¶ | 0.00 | ¶ | 0.00 | ¶ |
| AVERAGE | MG/L COMBI | ¶ | 53.00 | ¶ | 56.25 | ¶ |
| | MG/L OUTFA | ¶ | 31.70 | ¶ | 33.37 | ¶ |
| 4.00 | KG/DAY | ¶ | 56.39 | ¶ | 60.03 | ¶ |
| | LBS/DAY | ¶ | 124.32 | ¶ | 132.33 | ¶ |
| MAXIMUM | MG/L COMBI | ¶ | 65.00 | ¶ | 66.00 | ¶ |
| | MG/L OUTFA | ¶ | 45.12 | ¶ | 38.88 | ¶ |
| | KG/D | ¶ | 72.00 | ¶ | 72.47 | ¶ |
| | LBS/DAY | ¶ | 158.72 | ¶ | 159.76 | ¶ |
| MINIMUM | MG/L COMBI | ¶ | 0.00 | ¶ | 0.00 | ¶ |
| | MG/L OUTFA | ¶ | 0.00 | ¶ | 0.00 | ¶ |
| | KG/DAY | | 0.00 | | 0.00 | ¶ |
| | LBS/DAY | ¶ | 0.00 | | 0.00 | |
| | | * | | | | ¶ |

BOD MG/L ¶ BOD KG/DTSS MG/L TSS KG/D

LBS/MO

| CR 6+ | CR TOTAL | FLUORIDE |
|---|---|---|
| 0.0010 | 0.0020 | 4.90 |
| 0.0007 | 0.0014 | 3.40 |
| 0.0011 | 0.0022 | 5.43 |
| 0.0024 | 0.0049 | 11.97 |
| 0.0010 | 0.0020 | 4.60 |
| 0.0006 | 0.0012 | 2.65 |
| 0.0010 | 0.0020 | 4.66 |
| 0.0022 | 0.0045 | 10.27 |
| 0.0010 | 0.0040 | 3.30 |
| 0.0005 | 0.0021 | 1.74 |
| 0.0010 | 0.0042 | 3.43 |
| 0.0023 | 0.0092 | 7.56 |
| 0.0010 | 0.0020 | 3.10 |
| 0.0006 | 0.0011 | 1.76 |
| 0.0011 | 0.0022 | 3.40 |
| 0.0024 | 0.0048 | 7.50 |
| | | |
| 0.0000 | 0.0000 | 0.00 |
| 0.0000 | 0.0000 | 0.00 |
| 0.0000 | 0.0000 | 0.00 |
| 0.0010 | 0.0025 | 3.98 |
| 0.0006 | 0.0014 | 2.39 |
| 0.0011 | 0.0026 | 4.23 |
| 0.0023 | 0.0058 | 9.32 |
| 0.0010 | 0.0040 | 4.90 |
| 0.0007 | 0.0021 | 3.40 |
| 0.0011 | 0.0042 | 5.43 |
| 0.0024 | 0.0091 | 11.94 |
| 0.0000 | 0.0000 | 0.00 |
| 0.0000 | 0.0000 | 0.00 |
| 0.0000 | 0.0000 | 0.00 |
| 0.0000 | 0.0000 | 0.00 |

| CR6+ MG/L | CR6+ KG/D | CR MG/L | CR KG/D | F- MG/L | F- KG/D |
|---|---|---|---|---|---|

SCOEPA00035253

**WACKER** ANALYST(S) Elinor Levin

SPECIAL TEST REPORT: INCOMING INSPECTION

TEST METHOD DESCRIPTION:

Process wastewater Grab Sample about 8 ~~45~~ AM 9/25/84
Organic wastewater Grab Sample ~ 8 45 AM 9/25/84

analyze TCE and Freon TF

RESULTS:

| | TCE (PPM) | Freon TF (PPM |
|---|---|---|
| Process wastewater | 0.55 PPM | 1.46 PPM |
| Organic wastewater | 4.33 PPM | 5.62 PPM |

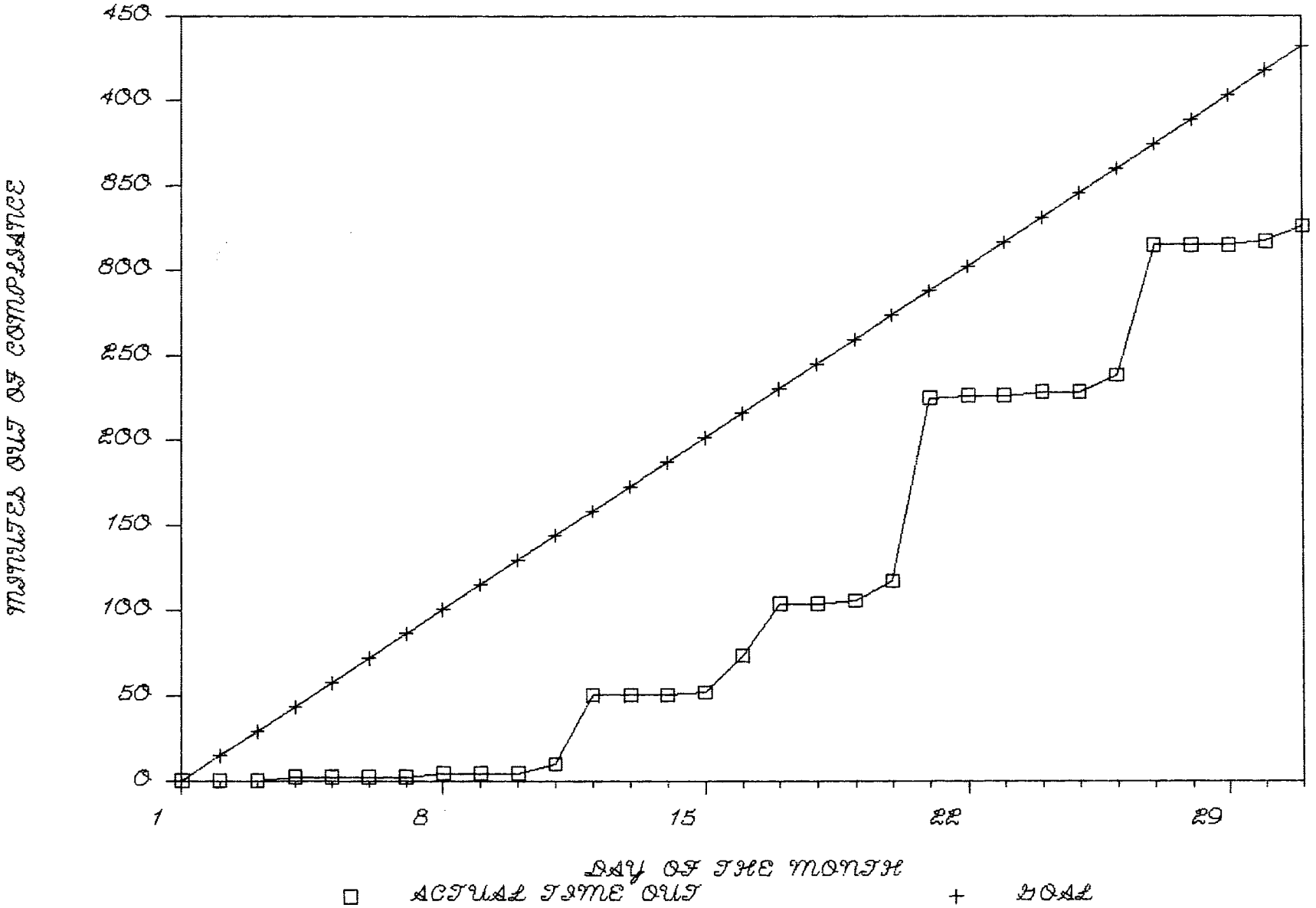
TTO — 2.01 ppm

COPIES SENT TO Greg Carr
Form # 107-016

SCOEPA00035254

# pH COMPLIANCE

AUGUST 1984




SCOEPA00035255

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if different)

NAME Wheeler Wire Corp

ADDRESS 21 Front St 29200
21 Front St SC 29203

FACILITY 420 Huger St and Line

LOCATION Parker Ave SC 29201

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

# DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158-R0073

(2-16) PERMIT NUMBER: OP-002358-7

(17-19) DISCHARGE NUMBER: 52

2834-J
73450

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 24 | 03 | 01 | TO | 24 | 03 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater Flow - MG/I | SAMPLE MEASUREMENT | 320,000 | 389,000 | GPD | — | — | — | — | | Cont | Meter |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| NWI BOD | SAMPLE MEASUREMENT | 150 | 201 | #/D | 37 | 53 | 67 | mg/l | | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 120 | 240 | | — | 45 | 90 | | | | |
| TSS | SAMPLE MEASUREMENT | 124 | 201 | #/D | 12 | 37 | 52 | mg/l | | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 61 | 180 | | — | 28 | 60 | | | | |
| Cr 6+ | SAMPLE MEASUREMENT | .005 | .010 | #/D | <.001 | .002 | .003 | mg/l | | 1/7 | 24HC |
| | PERMIT REQUIREMENT | .03 | .1 | | — | .01 | .05 | | | | |
| Cr Total | SAMPLE MEASUREMENT | .013 | .023 | #/D | .001 | .005 | .008 | mg/l | | 1/7 | 24HC |
| | PERMIT REQUIREMENT | .5 | 1.0 | | — | .1 | .2 | | | | |
| Flow | SAMPLE MEASUREMENT | 12.6 | 14.2 | #/D | 4 | 4.5 | 4.9 | mg/l | | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 21.4 | 42.7 | | — | 3 | 16 | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 4.3 | 10.2 | | SU | 0 | Continuous | Recorder |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.) | TELEPHONE | DATE |
|---|---|---|---|
| J.P. Hunt / D | J. Paul Sr. J.P. Hunt | 23 / 414-2470 | 04 / 05 / 12 |
| TYPED OR PRINTED | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE / NUMBER | YEAR / MO / DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

pH was out of compliance 95.3% of the time. 75% of the out of compliance was 326 minutes long. No violations lasted longer than 60 minutes.



SCOEPA00035256

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location [illegible])

NAME Wood [illegible] Corp
ADDRESS P.O. Box 03180
Portland, Or 97203
FACILITY [illegible] East Ave
LOCATION Portland, Or 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

# DISCHARGE MONITORING REPORT (DMR)

Form Approved
[illegible] No. 158-R0073

| (2-16) | (17-19) |
|---|---|
| OR-003058-7 | 7 |
| PERMIT NUMBER | DISCHARGE NUMBER |

2834-J
93450

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 08 | 01 | TO | 84 | 08 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Tom Cyanide (TCE) | SAMPLE MEASUREMENT | — | — | — | — | — | .03 | mg/l | | 1/mo | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 1.47 | | 0 | [illegible] | " |
| Blanket Flow MVS | SAMPLE MEASUREMENT | 280,000 | 411,000 | GPD | — | — | — | — | | 1/1 | Total reader |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | " | " |
| Total Pus | SAMPLE MEASUREMENT | — | — | — | <1.0 | <1.0 | <1.0 | mg/l | | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | 0 | " | " |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Outfall Flow | SAMPLE MEASUREMENT | 600,000 | 746,000 | GPD | — | — | — | | | 1/1 | Totalizing reader |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 6.6 | 6.9 | 7.3 | pH units | | 1/7 | Grab |
| | PERMIT REQUIREMENT | | — | | 6.0 | | 9.0 | | | " | " |
| Temp | SAMPLE MEASUREMENT | — | — | — | 19.8 | 19.6 | 21.4 | °C | | " | " |
| | PERMIT REQUIREMENT | — | — | | — | — | 29.4 | | | " | " |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)* | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| J P Hanna Dir Eng | | [illegible] | 503 | 243-2000 | 84 | 09 | 12 |
| TYPED OR PRINTED | | | AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 2 OF 2

SCOEPA00035257

DATE 9/29/84

**WACKER**

ANALYST(S) Elena Levin
analyzed 8/16/84

**SPECIAL TEST REPORT: INCOMING INSPECTION**

TEST METHOD DESCRIPTION:

Combined Effluent Grab 8/16/84 12^00 Noon
organic wastewater GRAB 8/16/84 12^10 hrs.

FreonTF

Standardization performed with Freon TE (See below)

RESULTS:

| | FreonTF * |
|---|---|
| Combined Effluent Grab 8/16/84 12^00 Noon | 1.40 PPM |
| Organic Wastewater Grab 8/16/84 12^10 hrs | 0.16 PPM |

* Weighed out FreonTE and estimated concentration of FreonTF by using 96.01% FreonTF (which was analysis of FreonTF for that lot number of FreonTE)

COPIES SENT TO Greg Carr
Form # 107-016

SCOEPA00035258

WTP084 PRINT TO M125

| DY OF YR | OF pH | DY OF MO | OWW TOT | COMB TOT | MV2 TOT | MV3 TOT |
|---|---|---|---|---|---|---|
| 213.00 | 6.0 - 9.0 | 1.00 | 78856 | 449175 | 1478067 | 2508379 |
| 214.00 | 0.00 | 2.00 | 84887 | 483138 | 1478649 | 2511439 |
| 215.00 | 0.00 | 3.00 | 90988 | 514573 | 1479301 | 2513897 |
| 216.00 | 2.10 | 4.00 | 97627 | 548412 | 1480020 | 2516793 |
| 217.00 | 2.10 | 5.00 | 104058 | 578707 | 1480688 | 2520627 |
| 218.00 | 2.10 | 6.00 | 110357 | 609674 | 1481280 | 2522439 |
| 219.00 | 2.10 | 7.00 | 116497 | 641777 | 1481880 | 2525414 |
| 220.00 | 4.30 | 8.00 | 123173 | 675337 | 1482534 | 2528152 |
| 221.00 | 4.30 | 9.00 | 129016 | 706594 | 1483150 | 2530754 |
| 222.00 | 4.30 | 10.00 | 135391 | 738276 | 1483772 | 2533357 |
| 223.00 | 9.90 | 11.00 | 141632 | 769174 | 1484400 | 2536188 |
| 224.00 | 50.80 | 12.00 | 147950 | 802793 | 1484978 | 2539219 |
| 225.00 | 50.80 | 13.00 | 153246 | 835958 | 1485538 | 2542250 |
| 226.00 | 50.80 | 14.00 | 158771 | 869136 | 1486152 | 2545281 |
| 227.00 | 52.00 | 15.00 | 165544 | 901785 | 1486823 | 2547656 |
| 228.00 | 73.50 | 16.00 | 172134 | 934913 | 1487461 | 2550671 |
| 229.00 | 104.20 | 17.00 | 178813 | 967720 | 1488099 | 2553794 |
| 230.00 | 104.20 | 18.00 | 185182 | 999319 | 1488715 | 2556931 |
| 231.00 | 105.90 | 19.00 | 191766 | 1028975 | 1489357 | 2560068 |
| 232.00 | 117.50 | 20.00 | 199041 | 1058926 | 1489982 | 2563206 |
| 233.00 | 224.90 | 21.00 | 207302 | 1088703 | 1490622 | 2567319 |
| 234.00 | 226.60 | 22.00 | 214365 | 1119205 | 1491224 | 2568583 |
| 235.00 | 226.60 | 23.00 | 221412 | 1149843 | 1491888 | 2571387 |
| 236.00 | 228.50 | 24.00 | 227890 | 1181756 | 1492544 | 2574252 |
| 237.00 | 228.50 | 25.00 | 233566 | 1214322 | 1493290 | 2577235 |
| 238.00 | 238.50 | 26.00 | 241267 | 1244194 | 1493729 | 2580168 |
| 239.00 | 315.00 | 27.00 | 249138 | 1276134 | 1494337 | 2582617 |
| 240.00 | 315.00 | 28.00 | 256706 | 1308087 | 1494936 | 2585550 |
| 241.00 | 315.00 | 29.00 | 265242 | 1342473 | 1495624 | 2589572 |
| 242.00 | 317.20 | 30.00 | 273549 | 1375333 | 1496315 | 2591475 |
| 243.00 | 326.00 | 31.00 | 279201 | 1402839 | 1497102 | 2593378 |
| 244.00 | 326.00 | 1.00 | 288424 | 1441704 | 1497596 | 2595004 |

| OWW FLOW | | COMB FLOW | MV2 FLOW | MV3 FLOW | OUTFALL |
|---|---|---|---|---|---|
| 228.27 | 1.00 | 1285.50 | 220.29 | 1158.21 | 2443.72 |
| 230.92 | 2.00 | 1189.82 | 246.78 | 930.36 | 2120.17 |
| 251.29 | 3.00 | 1280.81 | 272.14 | 1096.14 | 2376.95 |
| 243.41 | 4.00 | 1146.67 | 252.84 | 1451.17 | 2597.84 |
| 238.42 | 5.00 | 1172.10 | 224.07 | 685.84 | 1857.95 |
| 232.40 | 6.00 | 1215.10 | 227.10 | 1126.04 | 2341.14 |
| 252.69 | 7.00 | 1270.25 | 247.54 | 1036.34 | 2306.59 |
| 221.16 | 8.00 | 1183.08 | 233.16 | 984.86 | 2167.94 |
| 241.29 | 9.00 | 1199.17 | 235.43 | 985.24 | 2184.41 |
| 236.22 | 10.00 | 1169.49 | 237.70 | 1071.54 | 2241.03 |
| 239.14 | 11.00 | 1272.48 | 218.77 | 1147.24 | 2419.72 |
| 200.45 | 12.00 | 1255.30 | 211.96 | 1147.24 | 2402.54 |
| 209.12 | 13.00 | 1255.79 | 232.40 | 1147.24 | 2403.03 |
| 250.36 | 14.00 | 1235.77 | 253.97 | 898.94 | 2134.71 |
| 249.43 | 15.00 | 1253.90 | 241.48 | 1141.18 | 2395.08 |
| 252.80 | 16.00 | 1241.75 | 241.48 | 1182.06 | 2423.81 |
| 241.07 | 17.00 | 1196.03 | 233.16 | 1187.36 | 2383.38 |
| 249.21 | 18.00 | 1122.48 | 243.00 | 1187.36 | 2309.84 |
| 275.36 | 19.00 | 1133.65 | 236.56 | 1187.74 | 2321.39 |
| 312.68 | 20.00 | 1127.06 | 242.24 | 1556.78 | 2683.84 |
| 267.34 | 21.00 | 1154.50 | 227.86 | 478.43 | 1632.93 |
| 266.73 | 22.00 | 1159.65 | 251.32 | 1061.32 | 2220.97 |
| 245.19 | 23.00 | 1207.91 | 248.30 | 1084.41 | 2292.32 |
| 214.84 | 24.00 | 1232.63 | 282.36 | 1129.07 | 2361.70 |
| 291.48 | 25.00 | 1130.66 | 166.16 | 1110.14 | 2240.80 |
| 297.92 | 26.00 | 1208.93 | 230.13 | 926.95 | 2135.88 |
| 286.45 | 27.00 | 1209.42 | 226.72 | 1110.14 | 2319.57 |
| 323.09 | 28.00 | 1301.51 | 260.41 | 1522.33 | 2823.85 |
| 314.42 | 29.00 | 1243.75 | 261.54 | 720.29 | 1964.04 |
| 213.93 | 30.00 | 1041.11 | 297.88 | 720.29 | 1761.39 |
| 349.09 | 31.00 | 1471.04 | 186.98 | 615.44 | 2086.49 |
| | 1.00 | | | | |

| STREAM | COMBINED | OWW | MV2 | MV3 | OUTFALL |
|---|---|---|---|---|---|
| MAXIMUM FLOW M3/DY | 1471.04 | 349.09 | 297.88 | 1556.78 | 2823.85 |
| MINIMUM FLOW M3/DY | 1041.11 | 200.45 | 166.16 | 478.43 | 1632.93 |
| AVERAGE FLOW M3/DY | 1211.85 | 255.88 | 238.44 | 1057.67 | 2269.52 |
| MAXIMUM FLOW GPM | 269.87 | 64.04 | 54.65 | 285.60 | 518.04 |
| MINIMUM FLOW GPM | 190.99 | 36.77 | 30.48 | 87.77 | 299.57 |
| AVERAGE FLOW GPM | 222.32 | 46.94 | 43.74 | 194.03 | 416.35 |
| TOTAL FLOW GALLONS | 9924271 | 2095465 | 1952699 | 8661611 | 18585882 |
| DAILY FLOW GALLONS | 320138 | 67596 | 62990 | 279407 | 599545 |

TOTAL FLOW TO CITY SEWER
4048164.3 GALLONS

| DATE | OWW BOD | OWW TSS | METER VAULT THREE PHOSPHATE | METER VAULT THREE pH | METER VAULT THREE TEMP |
|---|---|---|---|---|---|
| 8/3/84 | 402.00 | 198.00 | <1 | 5.20 | 22.10 |
| 10.00 | 210.00 | 130.00 | <1 | 5.80 | 20.30 |
| 17.00 | 342.00 | 406.00 | <1 | 6.00 | 22.10 |
| 24.00 | 418.00 | 460.00 | <1 | 5.70 | 19.50 |
| 31.00 | 268.00 | 66.00 | <1 | 5.60 | 21.00 |
| AVERAGE | 328.00 | 252.00 | 0.00 | 5.66 | 21.00 |

COMBINED DISCHARGE

| pH | TEMP |
|---|---|
| 7.00 | 19.40 |
| 6.70 | 19.50 |
| 7.30 | 19.60 |
| 6.60 | 21.40 |
| 6.90 | 19.60 |
| 6.90 | 19.90 |

DATE LBS BOD IN OWW LBS TSS

SCOEPA00035259

| | | | |
|---|---|---|---|
| 0.00 | 222.72 | | 109.70 |
| 10.00 | 109.37 | | 67.71 |
| 17.00 | 181.77 | | 215.79 |
| 24.00 | 198.00 | | 217.89 |
| 31.00 | 206.27 | | 50.80 |
| AVERAGE | 183.63 | AVERAGE | 132.38 |
| AVERAGE TOTAL LBS/MO | 5736.34 | | 4407.19 |

LBS/MO

| DATE OF ANALYSIS | ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW PARAMETERS | * | BOD | TSS | CR 6+ | CR TOTAL | FLUORIDE |
|---|---|---|---|---|---|---|---|
| 3.00 | MG/L | * | 48.00 | 12.00 | 0.001 | 0.008 | 4.00 |
| OUTFALL | MG/L | * | 25.66 | 6.47 | 0.001 | 0.004 | 2.16 |
| | KG/DAY | * | 61.48 | 15.37 | 0.001 | 0.010 | 5.12 |
| | LBS/DAY | | 135.54 | 33.88 | 0.003 | 0.023 | 11.29 |
| 10.00 | MG/L | * | 37.00 | 48.00 | 0.001 | 0.001 | 4.50 |
| OUTFALL | MG/L | * | 19.31 | 25.05 | 0.001 | 0.001 | 2.35 |
| | KG/DAY | * | 43.27 | 56.14 | 0.001 | 0.001 | 5.26 |
| | LBS/DAY | | 95.40 | 123.76 | 0.003 | 0.003 | 11.60 |
| 17 | MG/L | * | 67.00 | 46.00 | 0.002 | 0.005 | 4.80 |
| JTFALL | MG/L | * | 33.62 | 23.08 | 0.001 | 0.003 | 2.41 |
| | KG/D | * | 80.13 | 55.02 | 0.002 | 0.006 | 5.74 |
| | LBS/DAY | | 176.66 | 121.29 | 0.005 | 0.013 | 12.66 |
| 24 | MG/L | * | 53.00 | 52.00 | 0.001 | 0.003 | 4.90 |
| OUTFALL | MG/L | * | 27.66 | 27.14 | 0.001 | 0.002 | 2.56 |
| | KG/DAY | * | 65.33 | 64.10 | 0.001 | 0.004 | 6.04 |
| | LBS/DAY | | 144.02 | 141.31 | 0.003 | 0.008 | 13.32 |
| 31 | MG/L | * | 62.00 | 28.00 | 0.003 | 0.006 | 4.40 |
| OUTFALL | MG/L | * | 43.71 | 19.74 | 0.002 | 0.004 | 3.10 |
| | KG/DAY | * | 91.20 | 91.20 | 0.004 | 0.009 | 6.47 |
| | LBS/DAY | | 201.07 | 201.07 | 0.010 | 0.019 | 14.27 |
| AVERAGE | MG/L COMBINED | | 53.40 | 37.20 | 0.002 | 0.005 | 4.52 |
| | MG/L OUTFALL | | 30.03 | 20.30 | 0.001 | 0.003 | 2.51 |
| 5 | KG/DAY | * | 68.28 | 56.36 | 0.002 | 0.006 | 5.73 |
| | LBS/DAY | | 150.54 | 124.26 | 0.005 | 0.013 | 12.63 |
| MAXIMUM | MG/L COMBINED | | 67.00 | 52.00 | 0.003 | 0.008 | 4.90 |
| | MG/L OUTFALL | | 43.71 | 27.14 | 0.002 | 0.004 | 3.10 |
| | KG/D | * | 91.20 | 91.20 | 0.004 | 0.010 | 6.47 |
| | lb/d | | 201.07 | 201.07 | 0.010 | 0.023 | 14.24 |
| MINIMUM | MG/L COMBINED | | 37.00 | 12.00 | 0.001 | 0.001 | 4.00 |
| | MG/L OUTFALL | | 19.31 | 6.47 | 0.001 | 0.001 | 2.16 |
| | KG/DAY | * | 43.27 | 15.37 | 0.001 | 0.001 | 5.12 |
| | lb/d | | 95.196714 | 33.813383 | 0.0025728 | 0.0025728 | 11.271127 |
| | | * | | | | | |
| | | | BOD MG/L | BOD KG/D | TSS MG/L | TSS KG/D | |
| | | | | | CR6+ MG/L | CR6+ KG/D | CR MG/L |
| | | | | | | CR KG/D | F- MG/L |
| | | | | | | | F- KG/D |

SCOEPA00035260

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 9/4/84 Week ending 8/3/84
ANALYSTS: H. HOGLE /

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 8-3-84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 48 | + 402 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 12 | + 198 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.0 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.008 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.2 | ▲ 7.0 | |
| Temperature | °C | – | – | 27 | | | ▲ 22.1 | ▲ 19.4 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
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▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035261

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 9/4/84
ANALYSTS: H. HOGLE

Week ending 8/10/84

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 8-10-84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 37 | + 210 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 48 | + 130 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.8 | ▲ 6.7 | |
| Temperature | °C | – | – | 27 | | | ▲ 20.3 | ▲ 19.5 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
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▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035262

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 9/4/84
ANALYSTS: H. HOGLE

Week ending 8/17/84

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Peagelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 8-17 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 67 | + 342 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 46 | + 406 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.8 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.002 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.005 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ < 1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 6.0 | ▲ 7.3 | |
| Temperature | °C | – | – | 27 | | | ▲ 22.1 | ▲ 19.6 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
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▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035263

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 9/4/84
ANALYSTS: H. HOGLE

Week ending 8/24/84

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGI
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 8-24 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 53 | + 418 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 52 | + 460 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.9 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.003 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 21 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.7 | ▲ 6.6 | |
| Temperature | °C | – | – | 27 | | | ▲ 19.5 | ▲ 21.4 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
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▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035264

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 9/4/84
ANALYSTS: H. HOGLE

Week ending 8/31/84

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGI
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 8-30 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 62 | + 268 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 28 | + 66 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.4 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.003 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.006 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.6 | ▲ 6.9 | |
| Temperature | °C | – | – | 27 | | | ▲ 21.0 | ▲ 19.6 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
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▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free avail. chlorine only during chlorination).

COMMENTS

E L82 L109

D 82 F109

SCOEPA00035265

Greg Carr

RECEIVED
SEP 10 1984
WACKER SILTRONIC
ENGINEERING

**Wacker Siltronic Corporation**
P.O. Box 03180
Portland, OR 97203
7200 N.W. Front Ave.
Portland, OR 97229
Phone (503) 243-2020
TWX 910-464-4777
FAX 503 226-0052

August 8, 1984

Chuck Clinton
Oregon DEQ
North West Region
PO Box 1760
Portland, Or. 97207

Attn: Mr. Clinton

Dear Chuck:

As you can see from the attached NPDES permit, our pH compliance was considerably poorer this month than normal. We experienced several days of poor pH control because of plugging problems in our acid feed system. We believe these were caused by accumulations of iron sulfate sludge in our steel acid storage tank. We are planning to clean out the tank and apply a corrosion-resistant coating as soon as the tank can be emptied and a temporary tank installed. This should occur around the middle of September. Until then we will be very alert to minimize any problems this sludge can cause. Total time out-of-compliance was 1776.8 minutes (29 hours, 37 minutes), or 3.98 % of the total time.

I will be on vacation the week of August 13 to August 17. Please contact Ram Waney if you have any questions.

Sincerely,

WACKER SILTRONIC CORPORATION

Greg Carr
Facilities Engineer

GC/md

cc: Ram Waney
File

DATE 8/24/84

**WACKER**

ANALYST(S) Elena Levin

## SPECIAL TEST REPORT: INCOMING INSPECTION

**TEST METHOD DESCRIPTION:**

| | | | |
|---|---|---|---|
| Combined Effluent | Grab | 8/16/84 | 12:00 Noon |
| Organic Wastewater | Grab | 8/16/84 | 1210 hrs |

TCE Analysis

**RESULTS:**

| | PPM TCE |
|---|---|
| Combined Effluent Grab 8/16/84 | 0.03 PPM |
| Organic Wastewater | 13.5 PPM |

COPIES SENT TO Greg Carr
Form # 107-016

SCOEPA00035268

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 8/1/84
ANALYSTS: H. HOGLE (Cr VI, Cr TOT), Nancy Lowe (total phosphate)

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | | | | | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | - | NPDES PARAMETER LIMITS | | | | | | | |
| Date 7/6/84 | - | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | - | 15 | 30 | ▲ 45 | + 295 | | | |
| TSS | mg/l | - | 15 | 30 | ▲ 40 | + 408 | | | |
| $F^-$ | mg/l | - | 6 | 20 | ▲ 5.1 | | | | |
| $Cr^{6+}$ | mg/l | - | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | - | 0.3 | 1 | ▲ 0.001 | | | | |
| Phosphates | mg/l | - | 2 | 5 | < 0.1 | | ▲ | | |
| Free Avail. Chlorine | mg/l | - | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | - | 9 | | | ▲ 5.3 | ▲ 6.6 | |
| Temperature | °C | - | - | 27 | | | ▲ 18.2 | ▲ 20.7 | |
| Turbidity | NTU | - | - | - | | | | | |
| Conductivity | µmho's cm | - | - | - | | | | | |
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▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035269

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 8/1/84
ANALYSTS: H. HOGLE (Cr III, Cr TOT) Nancy L. (Total phosphates)

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 7/13/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲- 37 | + 317 | | | |
| TSS | mg/l | – | 15 | 30 | ▲- 45 | + 92 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲- 3.8 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲- 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲- ≤0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | < 0.1 | | ▲ | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.6 | ▲ 7.4 | |
| Temperature | °C | – | – | 27 | | | ▲ 19.2 | ▲ 22.6 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
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▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035270

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE:
ANALYSTS: H. HOGUE (Cr VI, tot Cr) Nancy L.

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 7/20/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 28 | + 417 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 30 | + 154 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.6 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | < 0.1 | | ▲ | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 6.1 | ▲ 7.1 | |
| Temperature | °C | – | – | 27 | | | ▲ 19.3 | ▲ 22.6 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
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| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035271

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE:
ANALYSTS: H. HOGLE ($Cr^{III}$, $Cr^{TOT}$) : Nancy L.

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Powell | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 3/27/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 29 | + 322 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 11 | + 626 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.2 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ ≤ 0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | < 0.1 | | ▲ | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.8 | ▲ 6.7 | |
| Temperature | °C | – | – | 27 | | | ▲ 20.1 | ▲ 22.3 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035272

Greg Carr

[P784 TIME OUT PRINT TO M125

| OF YR | OF pH | DY OF MO | OWW TOT | COMB TOT | MV2 TOT | MV3 TOT | OWW FLOW |
|---|---|---|---|---|---|---|---|
| 1826.0 | - 9.0 | 1 | 899132 | 497769 | 1457802 | 2421120 | 174.49 |
| 183 | 0 | 2 | 903742 | 520158 | 1458437 | 2424112 | 237.62 |
| 184 | 23.6 | 3 | 910020 | 554691 | 1459150 | 2427104 | 217.79 |
| 185 | * | 4 | 915774 | 586920 | 1459840 | 2430097 | 217.03 |
| 186 | 84.4 | 5 | 921508 | 613624 | 1460492 | 2431912 | 198.22 |
| 187 | 89.3 | 6 | 926745 | 642708 | 1461232 | 2434659 | 214.27 |
| 188 | 104.4 | 7 | 932406 | 670505 | 1462045 | 2437461 | 162.11 |
| 189 | 104.4 | 8 | 936689 | 690333 | 1462525 | 2440263 | 215.37 |
| 190 | 127.9 | 9 | 942379 | 721389 | 1463164 | 2443042 | 232.97 |
| 191 | 446.8 | 10 | 948534 | 752793 | 1463828 | 2446501 | 259.73 |
| 192 | 731.1 | 11 | 955396 | 782782 | 1464640 | 2449610 | 220.10 |
| 193 | 731.1 | 12 | 961211 | 814267 | 1465153 | 2452718 | 238.34 |
| 194 | 731.1 | 13 | 967508 | 846087 | 1465831 | 2455827 | 219.30 |
| 195 | 731.7 | 14 | 973302 | 873059 | 1466486 | 2457171 | 194.17 |
| 196 | 731.7 | 15 | 978432 | 902043 | 1467044 | 2459793 | 189.33 |
| 197 | 756.7 | 16 | 983434 | 931267 | 1467607 | 2462521 | 228.12 |
| 198 | 812.3 | 17 | 989461 | 950544 | 1468325 | 2465377 | 246.29 |
| 199 | 893.9 | 18 | 995968 | 991927 | 1469100 | 2468402 | 225.13 |
| 200 | 946.4 | 19 | 1001916 | 1022499 | 1469727 | 2471428 | 223.47 |
| 201 | 975.8 | 20 | 1007820 | 1053160 | 1470525 | 2473810 | 219.42 |
| 202 | 1060.5 | 21 | 1013617 | 1086901 | 1471265 | 2476758 | 238.12 |
| 203 | 1265.8 | 22 | 1019908 | 1121838 | 1471918 | 2479707 | 240.54 |
| 204 | 1371 | 23 | 1026263 | 1154731 | 1472542 | 2482959 | 214.42 |
| 205 | 1375.6 | 24 | 1031928 | 1187707 | 1473149 | 2486399 | 229.90 |
| 206 | 1621.1 | 25 | 1038002 | 1219244 | 1473775 | 2489109 | 210.45 |
| 207 | 1732.7 | 26 | 1043562 | 1250404 | 1474358 | 2491632 | 242.20 |
| 208 | 1732.7 | 27 | 1049961 | 1284373 | 1475063 | 2494716 | 208.59 |
| 209 | 1771.8 | 28 | 1055472 | 1316130 | 1475674 | 2497248 | 209.54 |
| 210 | 1771.8 | 29 | 1061008 | 1345920 | 1476271 | 2499968 | 208.82 |
| 211 | 1773.8 | 30 | 1066525 | 1379888 | 1476846 | 2502625 | 223.54 |
| 212 | 1774.4 | 31 | 1072431 | 1412932 | 1477449 | 2505502 | 243.19 |
| 213 | 1776.8 | 1 | 1078856 | 1449175 | 1478067 | 2508379 | |

| STREAM | COMBINED | OWW | MV2 | MV3 | OUTFALL |
|---|---|---|---|---|---|
| [AXIMUM FLOW M3/DY | 1566.35 | 259.73 | 307.72 | 1309.24 | 2711.32 |
| [INIMUM FLOW M3/DY | 729.64 | 162.11 | 181.68 | 508.71 | 1529.60 |
| .VERAGE FLOW M3/DY | 1161.64 | 219.44 | 247.43 | 1065.41 | 2227.05 |
| [AXIMUM FLOW GPM | 287.35 | 47.65 | 56.45 | 240.18 | 497.40 |
| [INIMUM FLOW GPM | 133.85 | 29.74 | 33.33 | 93.32 | 280.61 |
| .VERAGE FLOW GPM | 213.11 | 40.26 | 45.39 | 195.45 | 408.56 |
| 'OTAL FLOW GALLONS | 9513083.2 | 1797055.5 | 2026291.9 | 8725004.1 | 18238087. |
| )AILY FLOW GALLONS | 306873.65 | 57969.532 | 65364.256 | 281451.75 | 588325.40 |

COMBINED DISCHARGE

| DATE | BOD | TSS | PHOSPHATE | pH | TEMP | pH | TEM |
|---|---|---|---|---|---|---|---|
| | 3980WW | | METER VAULT THREE | | 15.3 | COMBINED DISCHARGE | |
| 8 | BOD | TSS | PHOSPHATE | pH | TEMP | pH | TEM |
| 7/6 | 295 | 88 | .1 | 6.1 | 16.2 | 7.6 | 24 |
| 13 | 317 | 389 | .1 | 5.7 | 19.1 | 6.2 | 25 |
| 20 | 417 | 132 | .1 | 5.4 | 20.3 | 6.3 | 26 |
| 29 | 322 | 121.8 | .1 | 3.44 | 14.18 | 4.02 | 15. |
| AVERAGE | 337.75 | 182.7 | .1 | 5.16 | 17.445 | 6.03 | 22. |
| 0 | 923.25 | | | 0.00 | | | |

| DATE | LBS BOD IN OWW | | LBS TSS | | |
|---|---|---|---|---|---|
| 0 | 139.36 | | 41.57 | | |
| 13 | 153.28 | | 188.09 | | |
| 20 | 201.73 | | 63.86 | | |
| 29 | 148.09 | AVERAGE | 56.02 | | |
| 0 | 0.00 | 4829.46 | 0.00 | 1826.79 | LBS/M |
| AVERAGE | 128.49234 | AVERAGE | 69.907312 | | |
| AVERAGE TOTAL LBS/MO | 5065.68 | | | 2740.19 | LBS/M |

SCOEPA00035274

| | COMB FLOW MV2 | FLOW | MV3 FLOW | OUTFALL |
|---|---|---|---|---|
| 1 | 847.43 | 240.35 | 1132.48 | 1979.9016 |
| 2 | 1307.08 | 269.87 | 1132.48 | 2439.5534 |
| 3 | 1219.87 | 261.17 | 1132.85 | 2352.7252 |
| 4 | 1010.75 | 246.78 | 686.98 | 1697.7290 |
| 5 | 1100.83 | 280.09 | 1039.74 | 2140.5753 |
| 6 | 1052.12 | 307.72 | 1060.56 | 2112.6798 |
| 7 | 750.49 | 181.68 | 1060.56 | 1811.0522 |
| 8 | 1175.47 | 241.86 | 1051.85 | 2227.3278 |
| 9 | 1188.64 | 251.32 | 1309.24 | 2497.8804 |
| 10 | 1135.09 | 307.34 | 1176.76 | 2311.8471 |
| 11 | 1191.71 | 194.17 | 1176.38 | 2368.0924 |
| 12 | 1204.39 | 256.62 | 1176.76 | 2381.1506 |
| 13 | 1020.89 | 247.92 | 508.71 | 1529.5988 |
| 14 | 1097.05 | 211.20 | 992.43 | 2089.4777 |
| 15 | 1106.13 | 213.10 | 1032.55 | 2138.6828 |
| 16 | 729.64 | 271.76 | 1081.00 | 1810.6359 |
| 17 | 1566.35 | 293.34 | 1144.97 | 2711.3172 |
| 18 | 1157.15 | 237.32 | 1145.34 | 2302.4981 |
| 19 | 1160.52 | 302.04 | 901.59 | 2062.1120 |
| 20 | 1277.10 | 280.09 | 1115.82 | 2392.9220 |
| 21 | 1322.37 | 247.16 | 1116.20 | 2438.5693 |
| 22 | 1245.00 | 236.18 | 1230.89 | 2475.8895 |
| 23 | 1248.15 | 229.75 | 1302.04 | 2550.1893 |
| 24 | 1193.68 | 236.94 | 1025.74 | 2219.4171 |
| 25 | 1179.41 | 220.67 | 954.96 | 2134.3679 |
| 26 | 1285.73 | 266.84 | 1167.30 | 2453.0280 |
| 27 | 1202.01 | 231.26 | 958.36 | 2160.3709 |
| 28 | 1127.55 | 225.97 | 1029.52 | 2157.0780 |
| 29 | 1285.69 | 217.64 | 1005.68 | 2291.3702 |
| 30 | 1250.72 | 228.24 | 1088.95 | 2339.6669 |
| 31 | 1371.80 | 233.91 | 1088.95 | 2460.7494 |

1

TOTAL FLOW TO CITY SEWER
3823347 GALLONS

IARGE
TEMP
IARGE
TEMP
24.8
25.5
26.3
15.32

22.98

.BS/MO

.BS/MO

| E OF LYSIS | ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW PARAMETERS | * | BOD | TSS | CR 6+ |
|---|---|---|---|---|---|
| E OF LYSIS | ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW PARAMETERS | * | BOD | TSS | CR 6+ |
| | MG/L | * | 45 | 37.5 | .001 |
| FALL | MG/L | * | 22.410108 | 18.675090 | 4.9800E-4 |
| | KG/DAY | * | 47.345382 | 39.454485 | .00105212 |
| FAL | LBS/DAY | * | 104.37763 | 86.981358 | .00231950 |
| | MG/L | * | 37 | 45 | .001 |
| FALL | MG/L | * | 24.694744 | 30.034148 | 6.6743E-4 |
| FALL | KG/DAY | * | 37.773051 | 45.940197 | .00102089 |
| | LBS/DAY | * | 83.274468 | 101.27976 | .00225066 |
| | MG/L | * | 28 | 30.5 | .001 |
| FALL | MG/L | * | 14.943579 | 16.277827 | 5.3370E-4 |
| | KG/D | * | 35.758819 | 38.951571 | .00127710 |
| -------- | LBS/DAY | ---------- | 78.833893 | 85.872633 | .00281550 |
| | MG/L | * | 29 | 11 | .001 |
| FALL | MG/L | * | 16.135273 | 6.1202761 | 5.5639E-4 |
| -------- | KG/DAY | * | 34.858176 | 13.222067 | .00120201 |
| RAGE | LBS/DAY | NED | 76.848334 | 29.149368 | .00264994 |
| | MG/L | * | 36.033712 | 36.770321 | .00101683 |
| FALL | MG/L | * | 18.531041 | 18.909856 | 5.2292E-4 |
| IMUM | KG/DAY | * | 39.667089 | 39.667089 | .00111936 |
| | LBS/DAY | LL | 87.450063 | 87.450063 | .00246774 |
| RAGE | MG/L COMBINED | | 43.758428 | 40.192580 | .00125421 |
| IMUM | MG/L OUTFALL | | 24.178686 | 22.504299 | 6.9461E-4 |
| | KG/DAY | * | 48.850629 | 44.308852 | .00141787 |
| | LBS/DAY | * | 107.69610 | 97.683295 | .00312584 |
| IMUM | MG/L COMBINED | | 45 | 45 | .00101683 |
| | MG/L OUTFALL | | 24.694744 | 30.034148 | 6.6743E-4 |
| DATA SU | KG/D | * | 47.345382 | 45.940197 | .00127710 |
| | | | 47.345382 | 0 39.454485 | 0 .00105212 |
| IMUM | MG/L COMBINED | | 28 | 11 | .001 |
| | MG/L OUTFALL | | 14.943579 | 6.1202761 | 4.9800E-4 |
| | KG/DAY | * | 34.858176 | 13.222067 | .00102089 |

| CR TOTAL | FLOURIDE | |
|---|---|---|
| CR TOTAL | FLUORIDE | |
| .001 | 5.1 | |
| 4.9800E-4 | 2.5398122 | |
| .00105212 | 5.3658100 | |
| .00231950 | 11.829465 | |
| .001 | 3.8 | |
| 6.6743E-4 | 2.5362170 | |
| .00102089 | 3.8793944 | |
| .00225066 | 8.5525129 | |
| .001 | 4.6 | |
| 5.3370E-4 | 2.4550165 | |
| .00127710 | 5.8746631 | |
| .00281550 | 12.951282 | |
| .001 | 4.2 | |
| 5.5639E-4 | 2.3368327 | |
| .00120201 | 5.0484254 | |
| .00264994 | 11.129759 | |
| .00101683 | 4.3728017 | |
| 5.2292E-4 | 2.2487988 | |
| .00111936 | 4.8137232 | |
| .00246774 | 10.612334 | |
| .00125421 | 5.5182004 | |
| 6.9461E-4 | 3.0291693 | |
| .00141787 | 6.2455040 | |
| .00312584 | 13.768838 | |
| .00101683 | 5.1 | |
| 6.6743E-4 | 2.5398122 | |
| .00127710 | 5.8746631 | |
| 0 .00105212 | 0 5.3658100 | 0 |
| .001 | 3.8 | |
| 4.9800E-4 | 2.2487988 | |
| .00102089 | 3.8793944 | |

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

# DISCHARGE MONITORING REPORT (DMR)

Form Approved
O[illegible] No. 158-R0073

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if different)

NAME: [illegible]

ADDRESS: [illegible]

FACILITY: [illegible]

LOCATION: [illegible]

(2-16) PERMIT NUMBER: OR-[illegible]

(17-19) DISCHARGE NUMBER: 50

2834-J

93450

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 (18-21) | 06 (22-23) | 01 (24-25) | TO | 84 (26-27) | 06 (28-29) | 30 (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater Flow - MG1 | SAMPLE MEASUREMENT | 286,000 | 392,000 | GPD | — | — | — | — | cont. | Totalizing | |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| MG1 BOD | SAMPLE MEASUREMENT | 96 | 115 | #/D | 37 | 41 | 45 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 120 | 240 | | — | — | 90 | | | | |
| TSS | SAMPLE MEASUREMENT | 123 | 173 | #/D | 43 | 52 | 66 | mg/l | 1 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 161 | 160 | | — | — | 80 | | | | |
| Cr 6+ | SAMPLE MEASUREMENT | .002 | .005 | #/D | 0 | .0003 | .002 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | .03 | .04 | | — | — | .05 | | | | |
| Cr Total | SAMPLE MEASUREMENT | .004 | .008 | #/D | .001 | .002 | .003 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | .5 | 1.0 | | — | — | 1.0 | | | | |
| Fluoride | SAMPLE MEASUREMENT | 9.0 | 10.5 | #/D | 3.4 | 3.9 | 4.7 | mg/l | 0 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 21.4 | 42.7 | | — | — | 16 | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 5.3 | — | 11.6 | pH | 1 | continuous | |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | pH | 2 | 7/7 | Grab |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| J D Hyan / Dr Eng | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE 503 | NUMBER 245-2020 | YEAR 84 | MO 07 | DAY 12 |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Total time in compliance 98.5% of the time - Out of compliance on pH 5.84 in 24 hrs.

TSS above MG1 MPDES too high on 1/ 1 analysis above Peak limits

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

SCOEPA00035278

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if different)

NAME Wastech Services Corp.
ADDRESS P.O. Box 1720
Pelzer, SC 29669
FACILITY Pelzer Hauling Facility
LOCATION Pelzer, SC

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158-R0073

(2-16) PERMIT NUMBER: SR 0030578 (17-19) DISCHARGE NUMBER: 001

2834-J
93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 06 | 01 | TO | 84 | 06 | 30 |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | QUANTITY OR LOADING (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | QUALITY OR CONCENTRATION (46-53) AVERAGE | QUALITY OR CONCENTRATION (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Toxic Organics (TTO) | SAMPLE MEASUREMENT | — | — | — | — | — | .015 | mg/l | 0 | 1/mo | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 1.47 | | | 1/mo | |
| Bleedback Flow MG | SAMPLE MEASUREMENT | 240,000 | 354,000 | GPD | — | — | — | — | 0 | 1/1 | Totalizer |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | 1/1 | |
| Total $PO_3^{3-}$ | SAMPLE MEASUREMENT | — | — | — | .1 | .28 | .6 | mg/l | 0 | 1/1 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 5.0 | | | 1/1 | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Outfall Flow | SAMPLE MEASUREMENT | 530,000 | 674,000 | GPD | — | — | — | — | 0 | 1/1 | Totalizer |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | 1/1 | |
| pH | SAMPLE MEASUREMENT | — | — | — | 6.4 | 6.8 | 7.3 | SU | 0 | 1/2 | Grab |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | 1/2 | |
| Temp | SAMPLE MEASUREMENT | — | — | — | 19.7 | 21.0 | 23.9 | °C | 0 | 1/1 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 19.4 | | | 1/1 | |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: J. P. Hines Dir. Eng.

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 803, NUMBER 242-5020

DATE: YEAR 84, MO 07, DAY 12

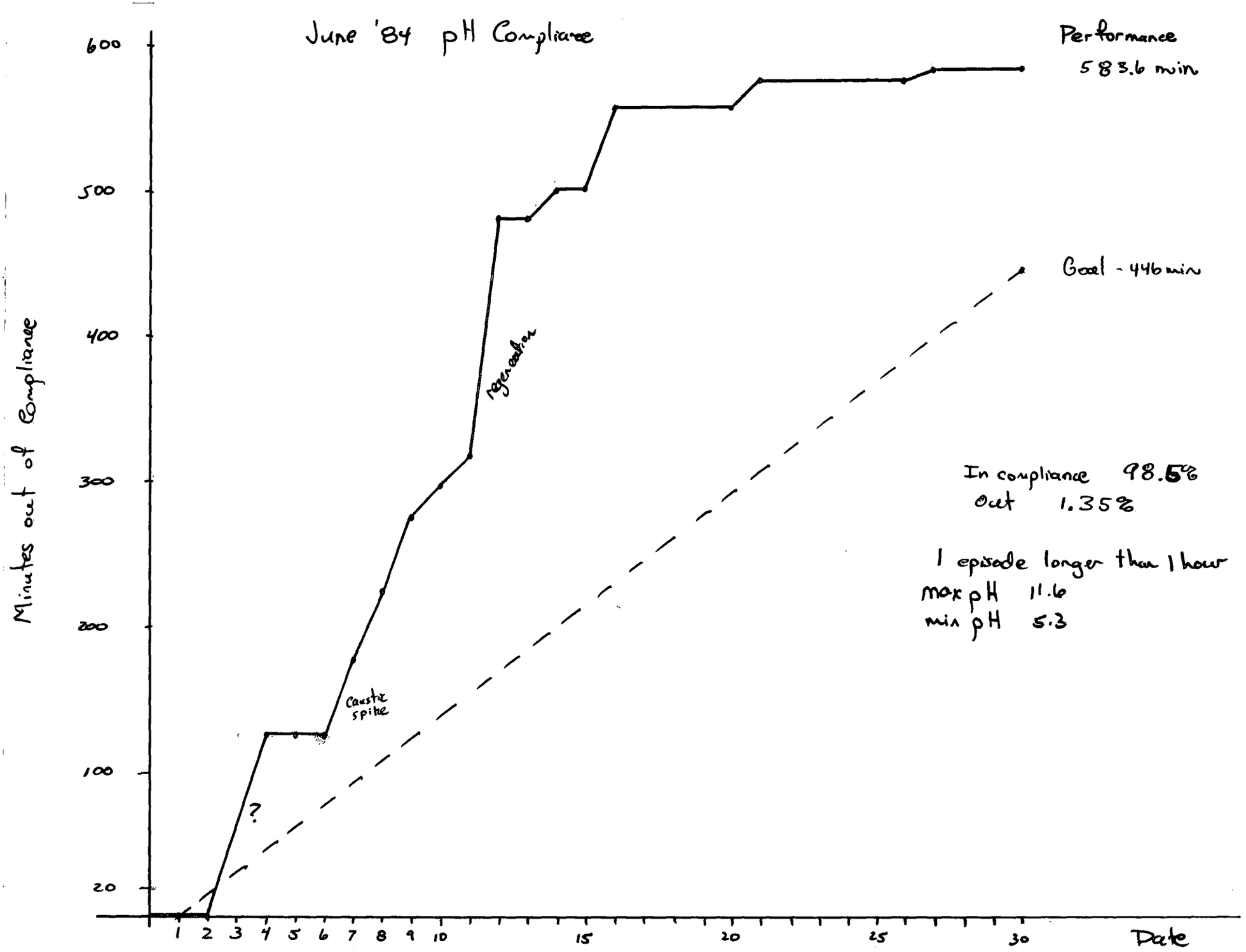
COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Average of 6 TTO samples made for collection of TTO. 1/2 of 1.5 = .75. 1/2 of 1.47 = .74. Sampling frequency changed to 1/mo effective August 2.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PAGE 2 OF 2

SCOEPA00035279




SCOEPA00035280

DATE

**WACKER**

ANALYST(S) Elinor Levin

SPECIAL TEST REPORT: INCOMING INSPECTION

TEST METHOD DESCRIPTION:

TCE Analysis of:

Process wastewater Grab 6/11/84 $10^{05}$ hrs

Organic wastewater Grab 6/11/84 $10^{10}$ hrs

by G.C.

RESULTS: If the data obtained for the various concentrations of TCE are entered into a Linear Regression Analysis, the following data are obtained. Data for TCE Concentrations on graph, page 2.

| | | Sample | TCE, PPM |
|---|---|---|---|
| correlation | 0.988 | Process wastewater | 0.18 PPM |
| Slope | 11.194 | organic wastewater | 2.61 PPM |
| Intercept | − 0.334 | | |

G.C Parameters:

Varian 3700GC Date 6/11/84

Blanks, Standards,

Sample Samples Sample Vol. 22 µl

Chart Speed ____ cm/min

Detector ECD Temp 150 °C

Column 10% Squalene Temp 60 °C

Injector B Temp 150 °C

Attenuation X64 Range 70

Operator EL

Flow Rate ~20 ml/min

on chromosorb WAW 80/100 mesh 2m × 1/8" S.S.

NEXT Step in TCE PC-ECD Project

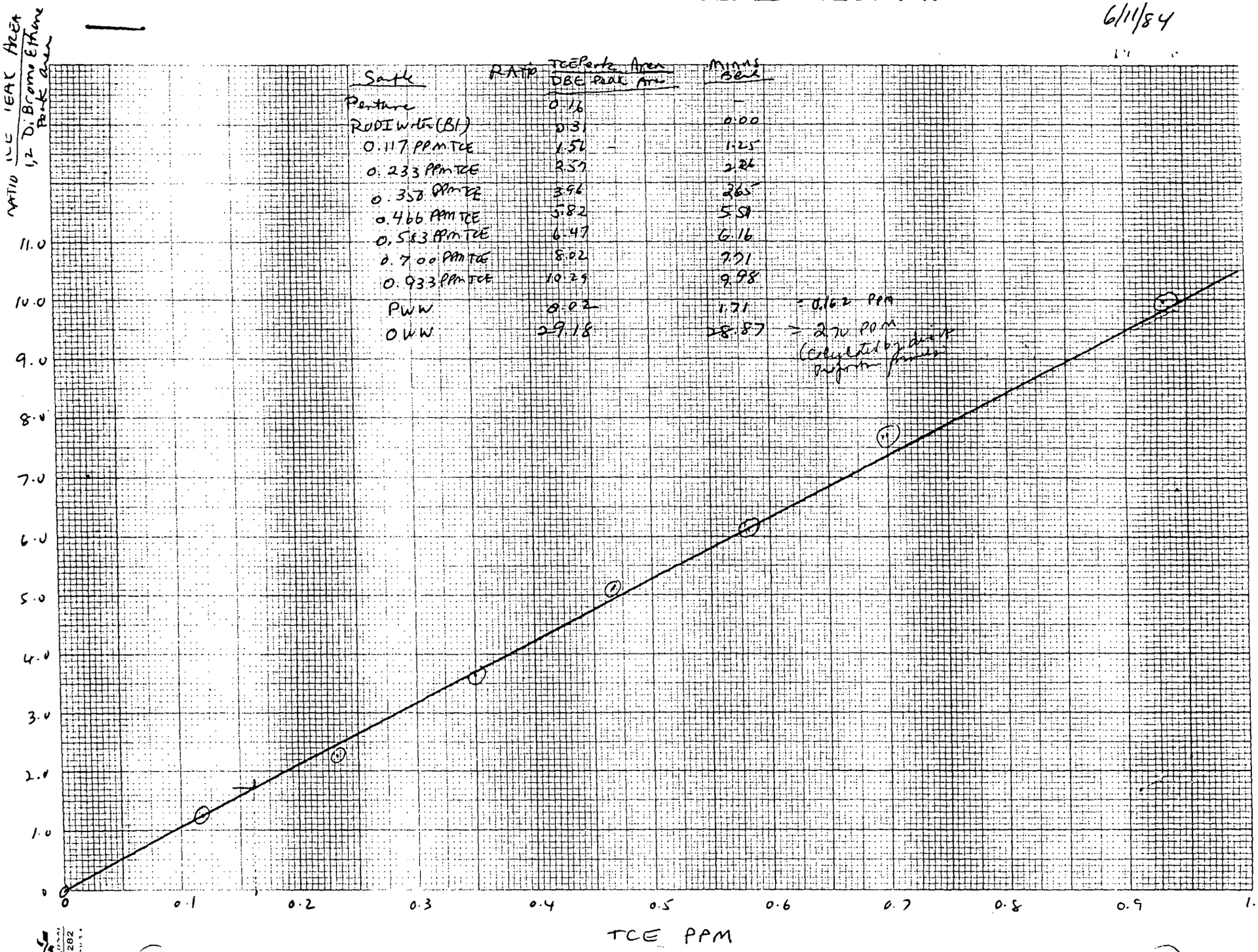
Since the concentration of TCE in the organic wastewater was 3x greater than the TCE concentration curve shown, the aliquot of OWW will be reduced to bring the TCE concentration into the concentration curve range of the graph.

COPIES SENT TO Sam, Greg, Ram Waney, Gary, Don Crane

Form # 107-016

SCOEPA00035281

6/11/84




| Sample | RATIO TCE Peak Area / DBE Peak Area | Minus Blank | |
|---|---|---|---|
| Pentane | 0.16 | – | |
| RODI Water (Bl) | 0.31 | 0.00 | |
| 0.117 PPM TCE | 1.52 | 1.25 | |
| 0.233 PPM TCE | 2.57 | 2.26 | |
| 0.350 PPM TCE | 3.96 | 3.65 | |
| 0.466 PPM TCE | 5.82 | 5.51 | |
| 0.583 PPM TCE | 6.47 | 6.16 | |
| 0.700 PPM TCE | 8.02 | 7.71 | |
| 0.933 PPM TCE | 10.29 | 9.98 | |
| PWW | 0.02 | 1.71 | = 0.162 PPM |
| OWW | 29.18 | 28.87 | = 270 PPM (Calculated by direct proportion formula) |

SCOEPA00035282

WACKER

ANALYST(S) Elinor Lin

SPECIAL TEST REPORT: INCOMING INSPECTION

TEST METHOD DESCRIPTION:

Samples WAD Grab Sample 5/28/84 20:45
WAD Next Tank Sample #2 5/28/84 2240

Total Chromium

RESULTS:

| | Total Chromium PPM |
|---|---|
| WAD Grab Sample 5/28/84 20.45 | 4.4 |
| WAD Next Tank Sample #2 5/28/84 22:40 | 3.6 |

COPIES SENT TO Gary Pendelton, Bragg Carr, Sam Pengely
Form # 107-016

SCOEPA00035283

DWTP684 TIME OUT PRINT TO M124

| DY OF YR | OF pH | DY OF MO | OWW TOT | COMB TOT | MV2 TOT | MV3 TOT | OWW FLOW | | COMB FLOW | MV2 FLOW | MV3 FLOW | OUTFALL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1536.0 - 9.0 | | 1 | 739679 | 638811 | 1438064 | 2347893 | 184.94 | 1 | 666.20 | 241.86 | 675.25 | 1341.4459 |
| 154 | 0 | 2 | 744565 | 656412 | 1438703 | 2349677 | 141.71 | 2 | 489.55 | 228.99 | 675.25 | 1164.7994 |
| 155 | 2.5 | 3 | 748309 | 669346 | 1439308 | 2351461 | 198.49 | 3 | 943.26 | 220.67 | 722.56 | 1665.8213 |
| 156 | 126.9 | 4 | 753553 | 694267 | 1439891 | 2353370 | 252.31 | 4 | 1256.28 | 265.71 | 836.11 | 2092.3921 |
| 157 | 126.9 | 5 | 760219 | 727458 | 1440593 | 2355579 | 190.46 | 5 | 1021.54 | 269.49 | 836.49 | 1858.0242 |
| 158 | 126.9 | 6 | 765251 | 754447 | 1441305 | 2357789 | 240.80 | 6 | 1334.18 | 321.35 | 982.21 | 2316.3891 |
| 159 | 176.7 | 7 | 771613 | 789696 | 1442154 | 2360384 | 222.29 | 7 | 1208.25 | 200.98 | 954.20 | 2162.4527 |
| 160 | 226.8 | 8 | 777486 | 821618 | 1442685 | 2362905 | 170.40 | 8 | 1058.74 | 256.25 | 800.15 | 1858.8948 |
| 161 | 274.5 | 9 | 781988 | 849590 | 1443362 | 2365019 | 123.32 | 9 | 406.70 | 197.58 | 800.15 | 1206.8509 |
| 162 | 294.1 | 10 | 785246 | 860335 | 1443884 | 2367133 | 146.97 | 10 | 705.37 | 221.04 | 741.86 | 1447.2369 |
| 163 | 317.2 | 11 | 789129 | 878971 | 1444468 | 2369093 | 239.36 | 11 | 1413.89 | 255.87 | 997.73 | 2411.6200 |
| 164 | 481.7 | 12 | 795453 | 916326 | 1445144 | 2371729 | 160.07 | 12 | 1099.43 | 334.97 | 997.73 | 2097.1612 |
| 165 | 481.7 | 13 | 799682 | 945373 | 1446029 | 2374365 | 268.21 | 13 | 1485.09 | 158.59 | 645.34 | 2130.4315 |
| 166 | 499.8 | 14 | 806768 | 984609 | 1446448 | 2376070 | 231.00 | 14 | 1402.99 | 239.21 | 697.20 | 2100.1893 |
| 167 | 503.7 | 15 | 812871 | 1021676 | 1447080 | 2377912 | 178.99 | 15 | 1204.47 | 226.34 | 934.90 | 2139.3641 |
| 168 | 557.8 | 16 | 817600 | 1053498 | 1447678 | 2380382 | 121.88 | 16 | 942.28 | 214.23 | 887.59 | 1829.8637 |
| 169 | 557.8 | 17 | 820820 | 1078393 | 1448244 | 2382727 | 132.02 | 17 | 675.32 | 207.04 | 1182.06 | 1857.3808 |
| 170 | 557.8 | 18 | 824308 | 1096235 | 1448791 | 2385850 | 227.86 | 18 | 1326.84 | 242.62 | 1182.44 | 2509.2733 |
| 171 | 557.8 | 19 | 830328 | 1131290 | 1449432 | 2388974 | 244.21 | 19 | 1306.21 | 295.23 | 845.95 | 2152.1575 |
| 172 | 557.8 | 20 | 836780 | 1165800 | 1450212 | 2391209 | 223.01 | 20 | 1316.28 | 259.27 | 1033.31 | 2349.5836 |
| 173 | 574.5 | 21 | 842672 | 1200576 | 1450897 | 2393939 | 220.89 | 21 | 1214.27 | 257.38 | 1338.38 | 2552.6495 |
| 174 | 574.5 | 22 | 848508 | 1232657 | 1451577 | 2397475 | 246.25 | 22 | 1186.11 | 271.39 | 987.13 | 2173.2400 |
| 175 | 574.5 | 23 | 855014 | 1263994 | 1452294 | 2400083 | 181.91 | 23 | 997.12 | 242.62 | 772.90 | 1770.0227 |
| 176 | 574.5 | 24 | 859820 | 1290338 | 1452935 | 2402125 | 176.08 | 24 | 1167.94 | 244.13 | 862.23 | 2030.1665 |
| 177 | 574.5 | 25 | 864472 | 1321195 | 1453580 | 2404403 | 217.37 | 25 | 958.02 | 275.17 | 1056.78 | 2014.7994 |
| 178 | 574.5 | 26 | 870215 | 1346506 | 1454307 | 2407195 | 253.03 | 26 | 1320.06 | 281.60 | 1035.20 | 2355.2612 |
| 179 | 583 | 27 | 876900 | 1381382 | 1455051 | 2409930 | 296.93 | 27 | 1238.57 | 333.84 | 1035.20 | 2273.7699 |
| 180 | 583.6 | 28 | 884745 | 1414105 | 1455933 | 2412665 | 212.94 | 28 | 1309.54 | 240.35 | 1034.82 | 2344.3603 |
| 181 | 583.6 | 29 | 890371 | 1448703 | 1456568 | 2415399 | 198.22 | 29 | 1143.79 | 237.70 | 1082.89 | 2226.6843 |
| 182 | 583.6 | 30 | 895608 | 1478922 | 1457196 | 2418260 | 133.38 | 30 | 713.36 | 229.37 | 1082.51 | 1795.8743 |
| 183 | * | 1 | 899132 | 1497769 | 1457802 | 2421120 | | 1 | | | | |

| STREAM | COMBINED | OWW | MV2 | MV3 | OUTFALL |
|---|---|---|---|---|---|
| MAXIMUM FLOW M3/DY | 1485.09 | 296.93 | 334.97 | 1338.38 | 2552.65 |
| MINIMUM FLOW M3/DY | 406.70 | 121.88 | 158.59 | 645.34 | 1164.80 |
| AVERAGE FLOW M3/DY | 1083.72 | 201.18 | 249.03 | 923.88 | 2007.61 |
| MAXIMUM FLOW GPM | 272.44 | 54.47 | 61.45 | 245.53 | 468.29 |
| MINIMUM FLOW GPM | 74.61 | 22.36 | 29.09 | 118.39 | 213.69 |
| AVERAGE FLOW GPM | 198.81 | 36.91 | 45.69 | 169.49 | 368.30 |
| TOTAL FLOW GALLONS | 8588698.1 | 1594366.3 | 1973597.4 | 7321948.2 | 15910646. |
| DAILY FLOW GALLONS | 277054.78 | 51431.171 | 63664.431 | 236191.88 | 513246.65 |

TOTAL FLOW TO CITY SEWER
3567963.6 GALLONS

| DATE | OWW BOD | OWW TSS | METER VAULT THREE PHOSPHATE | METER VAULT THREE pH | METER VAULT THREE TEMP | COMBINED DISCHARGE pH | COMBINED DISCHARGE TEMP |
|---|---|---|---|---|---|---|---|
| 1 | 727 | 838 | .1 | 5.8 | 19.2 | 6.7 | 22.3 |
| 8 | 348 | 124 | .1 | 5.2 | 19.1 | 7.3 | 20.4 |
| 15 | 595 | 210 | .2 | 6.1 | 18.3 | 6.4 | 19.7 |
| 22 | 343 | 162 | .4 | 5.5 | 19.7 | 7.2 | 23.9 |
| 29 | 425 | 314 | .6 | 5.2 | 18.5 | 6.6 | 21.3 |
| AVERAGE | 487.6 | 329.6 | .28 | 5.56 | 18.96 | 6.84 | 21.52 |

| DATE | LBS BOD IN OWW | | LBS TSS |
|---|---|---|---|
| 1 | 296.43 | | 341.69 |
| 8 | 130.74 | | 46.59 |
| 15 | 234.81 | | 82.88 |
| 22 | 186.23 | | 87.96 |
| 29 | 185.74 | | 137.23 |
| AVERAGE | 206.79148 | AVERAGE | 139.26785 |
| AVERAGE TOTAL LBS/MO | 6704.61 | | 4532.07 LBS/MO |

SCOEPA00035284

| DATE OF ANALYSIS | ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW PARAMETERS | * | BOD | TSS | CR 6+ | CR TOTAL | FLUORIDE |
|---|---|---|---|---|---|---|---|
| | MG/L | * | 37 | 44 | .001 | .003 | 4.7 |
| ALL | MG/L | * | 18.375243 | 21.851641 | 4.9663E-4 | .00148988 | 2.3341525 |
| | KG/DAY | * | 24.649394 | 29.312793 | 6.6620E-4 | .00199860 | 3.1311393 |
| | LBS/DAY | | 54.342055 | 64.622984 | .00146870 | .00440611 | 6.9029097 |
| 8 | MG/L | * | 42 | 63 | 0 | .001 | 3.4 |
| OUTFALL | MG/L | * | 23.921323 | 35.881984 | 0 | 5.6956E-4 | 1.9364880 |
| | KG/DAY | * | 44.467222 | 66.700833 | 0 | .00105874 | 3.5997275 |
| | LBS/DAY | | 98.032437 | 147.04866 | 0 | .00233411 | 7.9359592 |
| 15 | MG/L | * | 38 | 44 | .001 | .002 | 3.6 |
| OUTFALL | MG/L | * | 21.394077 | 24.772089 | 5.6300E-4 | .00112600 | 2.0268073 |
| | KG/D | * | 45.769720 | 52.996518 | .00120447 | .00240893 | 4.3360787 |
| | LBS/DAY | | 100.90392 | 116.83612 | .00265537 | .00531073 | 9.5593192 |
| 22 | MG/L | * | 44 | 66 | .002 | .003 | 4 |
| OUTFALL | MG/L | * | 24.014281 | 36.021422 | .00109156 | .00163734 | 2.1831165 |
| | KG/DAY | * | 52.188796 | 78.283195 | .00237222 | .00355833 | 4.7444360 |
| | LBS/DAY | | 115.05542 | 172.58313 | .00522979 | .00784469 | 10.459584 |
| 29 | MG/L | * | 45 | 43 | 0 | .001 | 4 |
| OUTFALL | MG/L | * | 23.115385 | 22.088035 | 0 | 5.1368E-4 | 2.0547009 |
| | KG/DAY | * | 51.470666 | 51.470666 | 0 | .00114379 | 4.5751703 |
| | LBS/DAY | | 113.47223 | 113.47223 | 0 | .00252161 | 10.086420 |
| AVERAGE | MG/L COMBINED | | 41.2 | 52 | .0008 | .002 | 3.94 |
| | MG/L OUTFALL | | 22.164062 | 28.123034 | 4.3024E-4 | .00106729 | 2.1070530 |
| 5 | KG/DAY | * | 43.709160 | 55.752801 | 8.4858E-4 | .00203368 | 4.0773104 |
| | LBS/DAY | | 96.361214 | 122.91262 | .00187077 | .00448345 | 8.9888384 |
| MAXIMUM | MG/L COMBINED | | 45 | 66 | .002 | .003 | 4.7 |
| | MG/L OUTFALL | | 24.014281 | 36.021422 | .00109156 | .00163734 | 2.3341525 |
| | KG/D | * | 52.188796 | 78.283195 | .00237222 | .00355833 | 4.7444360 |
| | Lb/D | | 115.1 | 173 | .005 | .008 | 10.5 |
| MINIMUM | MG/L COMBINED | | 37 | 43 | 0 | .001 | 3.4 |
| | MG/L OUTFALL | | 18.375243 | 21.851641 | 0 | 5.1368E-4 | 1.9364880 |
| | KG/DAY | * | 24.649394 | 29.312793 | 0 | .00105874 | 3.1311393 |
| | LB/D | | | | | | |
| | | * | | | | | |

| DATA SUMMARY FOR PLOTTING. | BOD MG/L | BOD KG/D | TSS MG/L | TSS KG/D | CR6+ MG/L | CR6+ KG/D | CR MG/L | CR KG/D | F- MG/L | F- KG/D |
|---|---|---|---|---|---|---|---|---|---|---|
| | 37 | 24.649394 | 44 | 29.312793 | .001 | 6.6620E-4 | .003 | .00199860 | 4.7 | 3.1311393 |
| | 42 | 44.467222 | 63 | 66.700833 | 0 | 0 | .001 | .00105874 | 3.4 | 3.5997275 |
| COMBINED | 38 | 45.769720 | 44 | 52.996518 | .001 | .00120447 | .002 | .00240893 | 3.6 | 4.3360787 |
| EFFLUENT | 44 | 52.188796 | 66 | 78.283195 | .002 | .00237222 | .003 | .00355833 | 4 | 4.7444360 |
| PARAMETERS | 45 | 51.470666 | 43 | 51.470666 | 0 | 0 | .001 | .00114379 | 4 | 4.5751703 |

| OUTFALL PARAMETERS | BOD MG/L | TSS MG/L | CR6+ MG/L | CR MG/L | F- MG/L |
|---|---|---|---|---|---|
| | 18.375243 | 21.851641 | 4.9663E-4 | .00148988 | 2.3341525 |
| | 23.921323 | 35.881984 | 0 | 5.6956E-4 | 1.9364880 |
| | 21.394077 | 24.772089 | 5.6300E-4 | .00112600 | 2.0268073 |
| | 24.014281 | 36.021422 | .00109156 | .00163734 | 2.1831165 |
| | 23.115385 | 22.088035 | 0 | 5.1368E-4 | 2.0547009 |

SCOEPA00035285

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 6-1-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 6/1 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 37 | + 727 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 44 | + 838 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.7 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.003 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.8 | ▲ 6.7 | |
| Temperature | °C | – | – | 27 | | | ▲ 19.2 | ▲ 22.3 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035286

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 6-8-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 6/8 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲-42 | +348 | | | |
| TSS | mg/l | – | 15 | 30 | ▲-63 | +124 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲-3.4 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲-0.000 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲-0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲5.2 | ▲7.3 | |
| Temperature | °C | – | – | 27 | | | ▲19.1 | ▲20.4 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
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▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035287

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 6-15-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 6/15 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲38 | +595 | | | |
| TSS | mg/l | – | 15 | 30 | ▲44 | +210 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲3.6 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲0.002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲0.2 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲6.1 | ▲6.4 | |
| Temperature | °C | – | – | 27 | | | ▲18.3 | ▲19.7 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035288

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 6-22-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 6/22 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲- 44 | +343 | | | |
| TSS | mg/l | – | 15 | 30 | ▲- 66 | + 162 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲- 4.0 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲- 0.002 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲- 0.003 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 0.4 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.5 | ▲ 7.2 | |
| Temperature | °C | – | – | 27 | | | ▲ 19.7 | ▲ 23.9 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035289

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 6-29-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 6/29 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 45 | + 425 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 43 | + 314 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.0 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.000 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 0.6 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.2 | ▲ 6.6 | |
| Temperature | °C | – | – | 27 | | | ▲ 18.5 | ▲ 21.3 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035290

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if different)

NAME: Wateree Power Corp

ADDRESS: P.O. Box 03160, Eastover, SC 29208

FACILITY: 7200 Hilton Head Ave

LOCATION: Carlisle, SC 29228

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

# DISCHARGE MONITORING REPORT (DMR)

Form Approved No. 158-R0073

(2-16) PERMIT NUMBER: OR 0002038-7

(17-19) DISCHARGE NUMBER: 46

2834-J

93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 94 | 05 | 01 | TO | 94 | 05 | 31 |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | QUANTITY OR LOADING (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | QUALITY OR CONCENTRATION (46-53) AVERAGE | QUALITY OR CONCENTRATION (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater Flow IMU 1 | SAMPLE MEASUREMENT | | | $m^3/d$ | — | — | — | — | — | Cont | Totalizing |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | Cont | Recorder |
| IMU1 BOD | SAMPLE MEASUREMENT | 35 | 52 | kg/d | 19 | 30 | 42 | mg/l | 3 | 1/7 | 24HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 25 | | | " | " |
| TSS | SAMPLE MEASUREMENT | 61 | 81 | kg/d | 36 | 57 | 64 | mg/l | 4 | " | " |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | | " | " |
| Cr 6+ | SAMPLE MEASUREMENT | .001 | .7 | kg/d | <.004 | <.009 | .35 * | mg/l | 1 | " | " |
| | PERMIT REQUIREMENT | .01 | .05 | | — | .02 | .05 | | | " | " |
| Cr Total | SAMPLE MEASUREMENT | .001 | 1.7 | kg/d | <.004 | <.009 | 3.7 * | mg/l | 1 | " | " |
| | PERMIT REQUIREMENT | .2 | .5 | | — | .5 | 1.0 | | | " | " |
| Fluoride | SAMPLE MEASUREMENT | 4.9 | 6.9 | kg/d | 3.5 | 4.9 | 5.6 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6.0 | 20.0 | | | " | " |
| pH | SAMPLE MEASUREMENT | — | — | — | 5.2 | — | 10.5 | pH units | 0 | Continuous | Recorder |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | 0 | " | " |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| J.P. Hamilton / Dir. Eng | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | AREA CODE: 803 | NUMBER: 213-2020 | YEAR: 94 | MO: 06 | DAY: 13 |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

pH was in the range 6.0 - 9.0 99.3% of the time. No excursions longer than 60 minutes. Existing effluent was very mild. Chromium spill on 5/28 has been reported separately. Max. Daily levels reached WAS Limit.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PAGE OF

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PERMITTEE NAME/ADDRESS (Include Facility Name/ Location (Department)

NAME: [illegible] Siltronic Corp.
ADDRESS: PO Box 03180
Portland OR 97203
FACILITY: 7200 NW Front Ave
LOCATION: Portland OR 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
# DISCHARGE MONITORING REPORT (DMR)

Form Approved No. 158-R0073

2834-J
93450

| (2-16) | (17-19) |
|---|---|
| OR-003058-7 | 49 |
| PERMIT NUMBER | DISCHARGE NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 05 | 01 | TO | 84 | 05 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | MAXIMUM (54-61) | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | AVERAGE (46-53) | MAXIMUM (54-61) | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Blowdown Flow MV3 | SAMPLE MEASUREMENT | 815 | 1202 | m3/d | — | — | — | — | | 1/1 | total |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | " | recorder |
| Total $PO_4^{3-}$ | SAMPLE MEASUREMENT | — | — | — | 5.1 | 2.0 | .1 | mg/l | | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | | " | " |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Outfall Flow | SAMPLE MEASUREMENT | 1877 | 2801 | m3/d | — | — | — | — | | 1/1 | totalizing |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | " | recorder |
| pH | SAMPLE MEASUREMENT | — | — | — | 6.8 | 7.1 | 7.8 | pH | | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | 6.0 | | 9.0 | units | | " | " |
| Temp | SAMPLE MEASUREMENT | — | — | — | 18.5 | 20.0 | 21.3 | °C | | " | " |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | | " | " |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| J. Pittman / Dir. Eng. | | | 503 | 243 2020 | 84 | 06 | 13 |
| TYPED OR PRINTED | | | AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE OF

SCOEPA00035292

dwtp564 TIME OUT PRINT TO M125

| DY OF YR | OF pH | DY OF MO | OWW TOT | COMB TOT | MV2 TOT | MV3 TOT | OWW FLOW | | COMB FLOW | MV2 FLOW | MV3 FLOW | OUTFALL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1226.0 | - 9.0 | 1 | 531698 | 768365 | 1412038 | 2281175 | 446.37 | 1 | 1244.55 | 421.27 | 892.51 | 2137.0553 | 1 .88 |
| 123 | .2 | 2 | 543491 | 801246 | 1413851 | 2283533 | 366.28 | 2 | 1199.24 | 444.36 | 992.51 | 2091.7487 | 2 .57 |
| 124 | .2 | 3 | 553168 | 832930 | 1414325 | 2285891 | 325.59 | 3 | 1285.58 | 423.16 | 641.94 | 1927.5170 | 3 .66 |
| 125 | .2 | 4 | 561770 | 866895 | 1415443 | 2287587 | 236.49 | 4 | 1018.21 | 358.44 | 786.53 | 1804.7313 | 4 .56 |
| 126 | .2 | 5 | 568018 | 893796 | 1416390 | 2289665 | 180.58 | 5 | 385.80 | 305.07 | 766.84 | 1162.6419 | 5 .34 |
| 127 | .2 | 6 | 572789 | 904253 | 1417196 | 2291691 | 236.18 | 6 | 676.72 | 336.49 | 986.75 | 1663.4746 | 6 .40 |
| 128 | .2 | 7 | 579029 | 922132 | 1418085 | 2294298 | 908.02 | 7 | 1292.43 | 576.84 | 747.54 | 2039.9697 | 7 .63 |
| 129 | 14.8 | 8 | 603019 | 956278 | 1419609 | 2296273 | 279.71 | 8 | 1328.27 | 468.96 | 747.92 | 2076.1923 | 8 .63 |
| 130 | 14.8 | 9 | 610409 | 991371 | 1420848 | 2298249 | 238.68 | 9 | 1365.14 | 406.51 | 840.65 | 2205.7911 | 9 .61 |
| 131 | 14.8 | 10 | 616715 | 1027438 | 1421922 | 2300470 | 229.03 | 10 | 1395.76 | 426.19 | 1201.74 | 2597.5019 | 10 .53 |
| 132 | 14.8 | 11 | 622766 | 1064314 | 1423048 | 2302645 | 300.45 | 11 | 1239.67 | 425.44 | 485.62 | 1725.2839 | 11 .71 |
| 133 | 14.8 | 12 | 630704 | 1097066 | 1424172 | 2304928 | 240.16 | 12 | 631.49 | 305.07 | 1023.09 | 1654.5799 | 12 .38 |
| 134 | 18 | 13 | 637049 | 1133750 | 1424978 | 2307631 | 238.38 | 13 | 836.98 | 345.67 | 513.63 | 1350.6056 | 13 .61 |
| 135 | 18 | 14 | 643347 | 1135863 | 1425812 | 2308988 | 257.19 | 14 | 1303.63 | 428.84 | 842.54 | 2146.1771 | 14 .60 |
| 136 | 18 | 15 | 650442 | 1170305 | 1426945 | 2311214 | 243.98 | 15 | 1351.25 | 260.41 | 862.98 | 2214.2316 | 15 .61 |
| 137 | 18 | 16 | 656588 | 1208005 | 1427633 | 2313494 | 230.13 | 16 | 1339.70 | 253.22 | 1093.11 | 2432.8160 | 16 .55 |
| 138 | 18 | 17 | 662668 | 1241400 | 1428302 | 2316382 | 229.60 | 17 | 1243.11 | 297.12 | 554.50 | 1797.6154 | 17 .69 |
| 139 | 24.6 | 18 | 668734 | 1274243 | 1429087 | 2317847 | 208.18 | 18 | 1270.89 | 233.91 | 768.74 | 2039.6291 | 18 .62 |
| 140 | 24.6 | 19 | 674234 | 1307820 | 1429705 | 2319878 | 129.26 | 19 | 898.52 | 216.12 | 741.86 | 1640.3861 | 19 .54 |
| 141 | 27 | 20 | 677649 | 1331559 | 1430276 | 2321838 | 134.75 | 20 | 629.71 | 221.42 | 1062.83 | 1692.5435 | 20 .37 |
| 142 | 31.9 | 21 | 681209 | 1348196 | 1430861 | 2324646 | 227.93 | 21 | 1309.80 | 283.50 | 1046.18 | 2355.9803 | 21 .55 |
| 143 | 47.4 | 22 | 687231 | 1382801 | 1431610 | 2327410 | 241.94 | 22 | 1263.85 | 264.57 | 518.93 | 1782.7782 | 22 .70 |
| 144 | 250.4 | 23 | 693623 | 1416192 | 1432309 | 2328781 | 238.08 | 23 | 638.04 | 279.71 | 899.70 | 1537.7366 | 23 .41 |
| 145 | 285.3 | 24 | 699913 | 1433049 | 1433048 | 2331158 | 235.20 | 24 | 1781.83 | 265.71 | 1019.30 | 2801.1355 | 24 .63 |
| 146 | 294.6 | 25 | 706127 | 1480125 | 1433750 | 2333851 | 216.01 | 25 | 996.63 | 253.60 | 1019.68 | 2016.3134 | 25 .49 |
| 147 | 294.6 | 26 | 711834 | 1506456 | 1434420 | 2336545 | 74.11 | 26 | 360.67 | 226.72 | 545.42 | 906.09387 | 26 .39 |
| 148 | 294.6 | 27 | 713792 | 1515985 | 1435019 | 2337986 | 153.18 | 27 | 522.98 | 185.47 | 604.09 | 1127.0628 | 27 .46 |
| 149 | 294.6 | 28 | 717839 | 1529802 | 1435509 | 2339582 | 172.26 | 28 | 789.48 | 229.37 | 780.09 | 1569.5685 | 28 .50 |
| 150 | 294.6 | 29 | 722390 | 1550660 | 1436115 | 2341643 | 203.10 | 29 | 1239.48 | 252.78 | 775.93 | 2015.4050 | 29 .64 |
| 151 | 294.6 | 30 | 727756 | 1583407 | 1436730 | 2343693 | 210.37 | 30 | 1150.76 | 236.94 | 754.73 | 1905.4883 | 30 .60 |
| 152 | 297.4 | 31 | 733314 | 1613810 | 1437356 | 2345687 | 240.92 | 31 | 946.29 | 267.98 | 834.97 | 1781.2642 | 31 .53 |
| 153 | 298.1 | 1 | 739679 | 1638811 | 1438064 | 2347893 | | 1 | | | | | 1 |

| STREAM | COMBINED | OWW | MV2 | MV3 | OUTFALL |
|---|---|---|---|---|---|
| MAXIMUM FLOW M3/DY | 1781.83 | 908.02 | 576.84 | 1201.74 | 2801.14 |
| MINIMUM FLOW M3/DY | 360.67 | 74.11 | 185.47 | 485.62 | 906.09 |
| AVERAGE FLOW M3/DY | 1062.79 | 253.94 | 317.77 | 814.61 | 1877.40 |
| MAXIMUM FLOW GPM | 326.98 | 166.58 | 105.82 | 220.46 | 513.88 |
| MINIMUM FLOW GPM | 66.17 | 13.60 | 34.02 | 89.09 | 166.23 |
| AVERAGE FLOW GPM | 194.97 | 46.59 | 58.30 | 149.44 | 344.41 |
| TOTAL FLOW GALLONS | 8703566.3 | 2079596.5 | 2602332.8 | 6671115.0 | 15374691. |
| DAILY FLOW GALLONS | 280760.20 | 67083.757 | 83946.219 | 215197.26 | 495957.46 |

TOTAL FLOW TO CITY SEWER
4581929 GALLONS

| DATE | OWW BOD | TSS | METER VAULT THREE PHOSPHATE | pH | COMBINED DISCHARGE TEMP | pH | TEMP |
|---|---|---|---|---|---|---|---|
| 5/4 | 505 | 1164 | .1 | 5.3 | 21.2 | 6.8 | 20.4 |
| 11 | 505 | 500 | <.1 | 5.8 | 20.6 | 7.2 | 18.5 |
| 18 | 438 | 222 | <.1 | 6.2 | 22 | 6.6 | 21.3 |
| 25 | 478 | 266 | <.1 | 5.6 | 21.4 | 7.8 | 19.8 |
| AVERAGE | 481.5 | 276 | .025 | 5.725 | 21.3 | 7.1 | 20 |

| DATE | LBS BOD IN OWW | LBS TSS |
|---|---|---|
| 0 | 263.31 | 60.48 |
| 11 | 334.53 | 331.22 |
| 18 | 201.04 | 101.89 |
| 25 | 227.65 | 126.69 |
| 0 | 0.00 | 0.00 |
| AVERAGE | 205.30637 | AVERAGE 124.05680 |
| AVERAGE TOTAL LBS/MO | 8357.11 | 4790.37 LBS/MO |

SCOEPA00035293

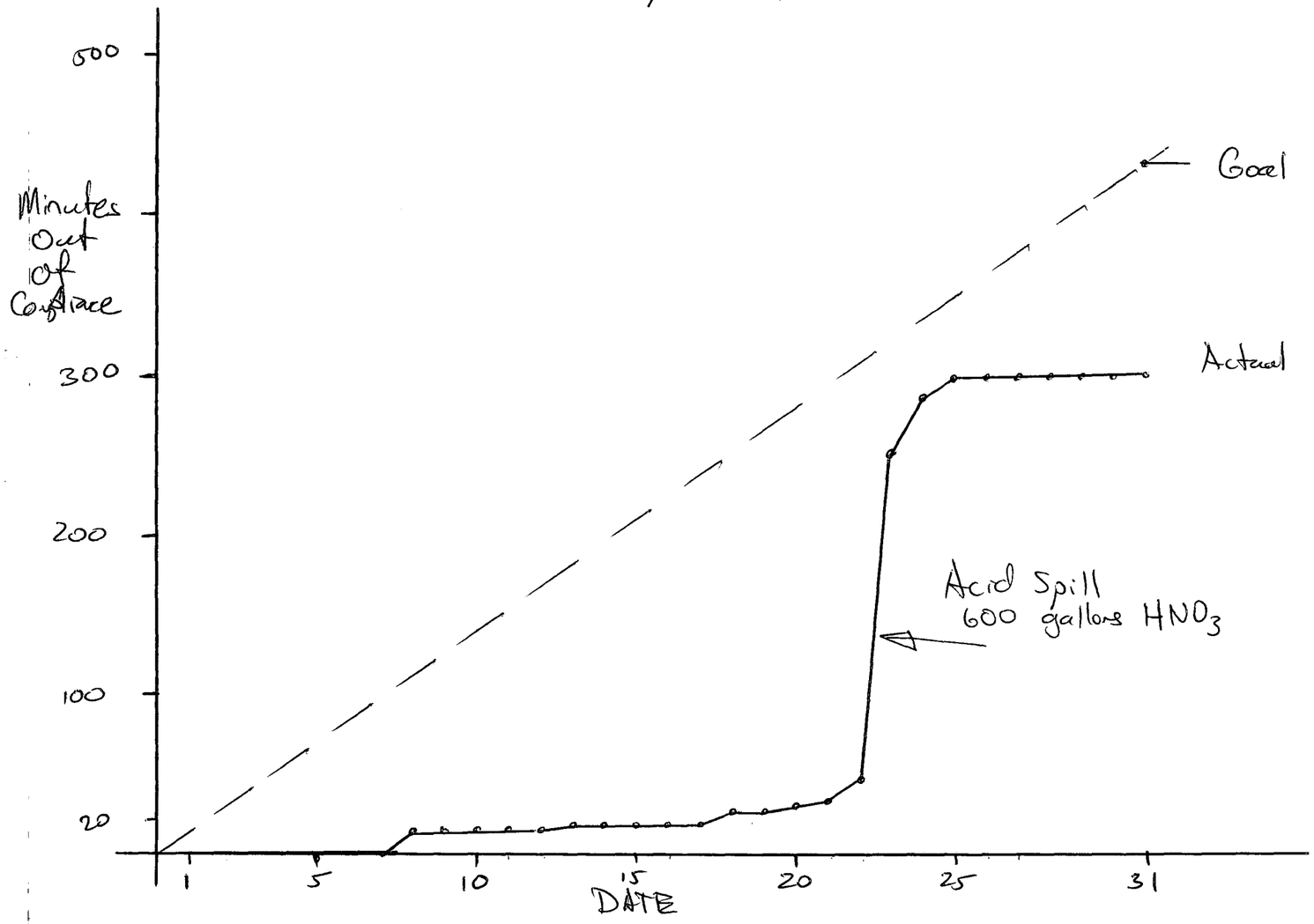
| TE OF ALYSIS | ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW PARAMETERS | * | BOD | TSS | CR 6+ | CR TOTAL | FLUORIDE | EFFLUENT FLOW | |
|---|---|---|---|---|---|---|---|---|---|
| | MG/L | * | 19 | 36 | .001 | .001 | 3.5 | 1018.2059 | COMBI |
| TFALL | MG/L | * | 10.719553 | 20.310732 | 5.6419E-4 | 5.6419E-4 | 1.9746545 | .56418699 | OUTFA |
| | KG/DAY | * | 19.345912 | 36.655413 | .00101821 | .00101821 | 3.5637207 | 236.48751 | OWW |
| | LBS/DAY | | 42.649998 | 80.810523 | .00224474 | .00224474 | 7.8565786 | 521.36036 | |
| 1 | MG/L | * | 42 | 56 | .001 | .001 | 5.6 | 1239.6669 | COMBI |
| TFALL | MG/L | * | 30.178228 | 40.237638 | 7.1853E-4 | 7.1853E-4 | 4.0237638 | .71852924 | OUTFA |
| | KG/DAY | * | 52.066011 | 69.421347 | .00123967 | .00123967 | 6.9421347 | 300.45420 | OWW |
| | LBS/DAY | | 114.78473 | 153.04630 | .00273297 | .00273297 | 15.304630 | 662.38133 | |
| B | MG/L | * | 34 | 64 | .001 | .001 | 4.1 | 1270.8933 | COMBI |
| TFALL | MG/L | * | 21.185406 | 39.878412 | 6.2310E-4 | 6.2310E-4 | 2.5547108 | .62310019 | OUTFA |
| | KG/D | * | 43.210371 | 81.337169 | .00127089 | .00127089 | 5.2106624 | 208.17562 | OWW |
| | LBS/DAY | | 95.261584 | 179.31592 | .00280181 | .00280181 | 11.487426 | 458.94398 | |
| 5 | MG/L | * | 26 | 58 | .001 | .001 | 3.7 | 996.63134 | COMBI |
| TFALL | MG/L | * | 12.851383 | 28.668469 | 4.9428E-4 | 4.9428E-4 | 1.8288506 | .49428394 | OUTFA |
| | KG/DAY | * | 25.912415 | 57.804618 | 9.9663E-4 | 9.9663E-4 | 3.6875360 | 216.01060 | OWW |
| | LBS/DAY | | 57.126510 | 127.43606 | .00219717 | .00219717 | 8.1295418 | 476.21696 | |
| | MG/L | * | | | | | | 395.79864 | COMBI |
| TFALL | MG/L | * | 0 | 0 | 0 | 0 | 0 | .34043038 | OUTFA |
| | KG/DAY | * | 0 | 0 | 0 | 0 | 0 | 180.58299 | OWW |
| | LBS/DAY | | 0 | 0 | 0 | 0 | 0 | 398.11304 | |
| ERAGE | MG/L COMBINED | | 30.25 | 53.5 | .001 | .001 | 4.225 | | |
| | MG/L OUTFALL | | 18.733643 | 32.273813 | 6.0003E-4 | 6.0003E-4 | 2.5954949 | | |
| | KG/DAY | * | 35.133677 | 61.304637 | .00113135 | .00113135 | 4.8510434 | | |
| | LBS/DAY | | 77.455705 | 135.15220 | .00249417 | .00249417 | 10.694544 | 0 | |
| XIMUM | MG/L COMBINED | | 42 | 64 | .001 | .001 | 5.6 | | |
| | MG/L OUTFALL | | 30.178228 | 40.237638 | 7.1853E-4 | 7.1853E-4 | 4.0237638 | | |
| | KG/D | * | 52.066011 | 81.337169 | .00127089 | .00127089 | 6.9421347 | | |
| NIMUM | MG/L COMBINED | | 0 | 0 | 0 | 0 | 0 | | |
| | MG/L OUTFALL | | 0 | 0 | 0 | 0 | 0 | | |
| | KG/DAY | * | 0 | 0 | 0 | 0 | 0 | | |

| | * | BOD MG/L | BOD KG/D | TSS MG/L | TSS KG/D | CR6+ MG/L | CR6+ KG/D | CR MG/L | CR KG/D | F- MG/L | F- KG/D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DATA SUMMARY FOR PLOTTING. | | 19 | 19.345912 | 36 | 36.655413 | .001 | .00101821 | .001 | .00101821 | 3.5 | 3.5637207 |
| | | 42 | 52.066011 | 56 | 69.421347 | .001 | .00123967 | .001 | .00123967 | 5.6 | 6.9421347 |
| COMBINED | | 34 | 43.210371 | 64 | 81.337169 | .001 | .00127089 | .001 | .00127089 | 4.1 | 5.2106624 |
| EFFLUENT | | 26 | 25.912415 | 58 | 57.804618 | .001 | 9.9663E-4 | .001 | 9.9663E-4 | 3.7 | 3.6875360 |
| PARAMETERS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| OUTFALL PARAMETERS | BOD MG/L | TSS MG/L | CR6+ MG/L | CR MG/L | F- MG/L |
|---|---|---|---|---|---|
| | 10.719553 | 20.310732 | 5.6419E-4 | 5.6419E-4 | 1.9746545 |
| | 30.178228 | 40.237638 | 7.1853E-4 | 7.1853E-4 | 4.0237638 |
| | 21.185406 | 39.878412 | 6.2310E-4 | 6.2310E-4 | 2.5547108 |
| | 12.851383 | 28.668469 | 4.9428E-4 | 4.9428E-4 | 1.8288506 |
| | 0 | 0 | 0 | 0 | 0 |

SCOEPA00035294

PH compliance Chart
May 1984



WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 5-4-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 5/4/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 19 | + 505 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 36 | + 116 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 3.5 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.3 | ▲ 6.8 | |
| Temperature | °C | – | – | 27 | | | ▲ 21.2 | ▲ 20.4 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

5/28/84 2043 WAD Grab.

$Cr^{6+}$ 3.74 = 3.7 } Over calibrate
$Cr^{Total}$ 3.79 = 3.8 }

SCOEPA00035296

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 5-11-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 5/11/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 42 | + 505 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 56 | +500 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 5.6 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.8 | ▲ 7.2 | |
| Temperature | °C | – | – | 27 | | | ▲ 20.6 | ▲ 18.5 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035297

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 5-18-84
ANALYSTS: Elias

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By Spengell | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 5/18/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲34 | +438 | | | |
| TSS | mg/l | – | 15 | 30 | ▲64 | +222 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲4.1 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲<0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲6.2 | ▲6.6 | |
| Temperature | °C | – | – | 27 | | | ▲22.0 | ▲21.3 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035298

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 5-25-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 5/25/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 26 | + 478 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 58 | + 266 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 3.7 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.6 | ▲ 7.8 | |
| Temperature | °C | – | – | 27 | | | ▲ 21.4 | ▲ 19.8 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035299

Greg Carr

RECEIVED
JUN 12 1984
WACKER SILTRONIC
ENGINEERING

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if different)

NAME Washington County - Tigard
ADDRESS PO Box 23180
Portland OR 97223
FACILITY 12200 NW Front Ave
LOCATION Portland, OR 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

# DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158-R0073

(2-16) PERMIT NUMBER: OR 0030538-7 (17-19) DISCHARGE NUMBER: 4B

Z834-J
93450

MONITORING PERIOD

| | YEAR (20-21) | MO (22-23) | DAY (24-25) | | YEAR (26-27) | MO (28-29) | DAY (30-31) |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 04 | 01 | TO | 84 | 04 | 30 |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | QUANTITY OR LOADING (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | QUALITY OR CONCENTRATION (46-53) AVERAGE | QUALITY OR CONCENTRATION (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater Flow - MWI | SAMPLE MEASUREMENT | 111.2 | 1473 | $m^3/d$ | — | — | — | — | 1 | Cont. | Totalizing Recorder |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| MWI BOD | SAMPLE MEASUREMENT | 31 | 40 | kg/d | 17 | 27 | 32 | mg/l | 1 | 1/7 | 24 HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 25 | 30 | | | 1/M | " |
| TSS | SAMPLE MEASUREMENT | 70 | 86 | kg/d | 36 | 56 | 69 | mg/l | 4 | " | " |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 25 | 30 | | | 1/M | " |
| Cr 6+ | SAMPLE MEASUREMENT | <.001 | .001 | kg/d | <.001 | <.001 | <.001 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | .01 | .05 | | — | .01 | .05 | | | 1/M | " |
| Cr, Total | SAMPLE MEASUREMENT | <.002 | .002 | kg/d | <.002 | <.002 | <.002 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | .2 | .5 | | — | .05 | 1.0 | | | 1/M | " |
| Fluoride | SAMPLE MEASUREMENT | 5.9 | 7.4 | kg/d | 4.1 | 4.7 | 6.0 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6.9 | 20.0 | | | 1/M | " |
| pH | SAMPLE MEASUREMENT | — | — | — | 2.6 | — | 11.1 | pH units | 1 | Cont. | Recorder |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | 1/D | Grab |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| J.P. Hurn / Dir. Eng. | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years) | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE AREA CODE | (NUMBER | DATE YEAR | MO | DAY |
| TYPED OR PRINTED | | | 503 | 243 2002 | 84 | 05 | 15 |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

pH was out of range 6.0 to 9.0 95.4% of the time. Longest Non-Compliance Total time out = 270.8 min. = 60 minutes.

ERASE AND REUSE

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PAGE 1 OF 2

SCOEPA00035301

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if different)*

NAME Wheatland Steel Corporation

ADDRESS P.O. Box 6288

Fayetteville, NC 28306

FACILITY 3200 New Road Ave

LOCATION Parkton, NC 28371

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

**DISCHARGE MONITORING REPORT** *(DMR)*

Form Approved
OMB No. 158-R0073

2834-J

93450

(2-16) PERMIT NUMBER: NC0003058-7

(17-19) DISCHARGE NUMBER: 48

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 24 | 04 | 01 | TO | 24 | 04 | 30 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

**NOTE: Read instructions before completing this form.**

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Blowdown Flow MU 3 | SAMPLE MEASUREMENT | 808 | 1015 | $m^3/d$ | — | — | — | — | — | 1/1 | Totalizing Recorder |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| Total $PO_4$ | SAMPLE MEASUREMENT | — | — | — | < 0.1 | < 0.1 | < 0.1 | mg/L | — | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Outfall Flow | SAMPLE MEASUREMENT | 1920 | 2382 | $m^3/d$ | — | — | — | — | — | 1/1 | Totalizing Recorder |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| pH | SAMPLE MEASUREMENT | — | — | — | 6.7 | 7.0 | 7.2 | pH Units | — | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | 1/3 | Grab |
| Temp | SAMPLE MEASUREMENT | — | — | — | 16.7 | 17.7 | 18.5 | °C | — | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | | 1/3 | Grab |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

J.P. Hayes / Div. Eng.

TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 910 NUMBER 243-2010

DATE: YEAR 24 MO 04 DAY 15

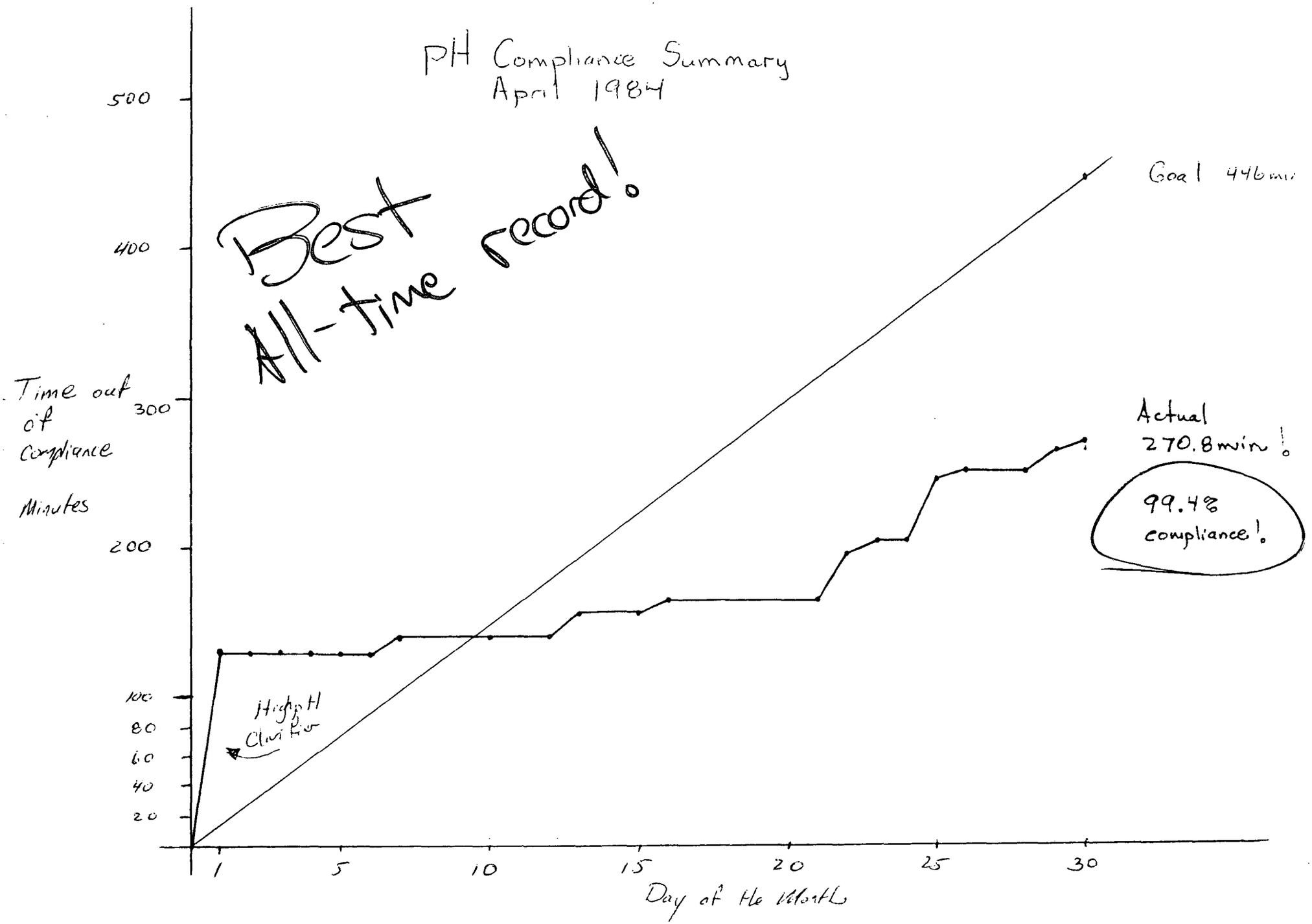
COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

PLACE STATE HERE

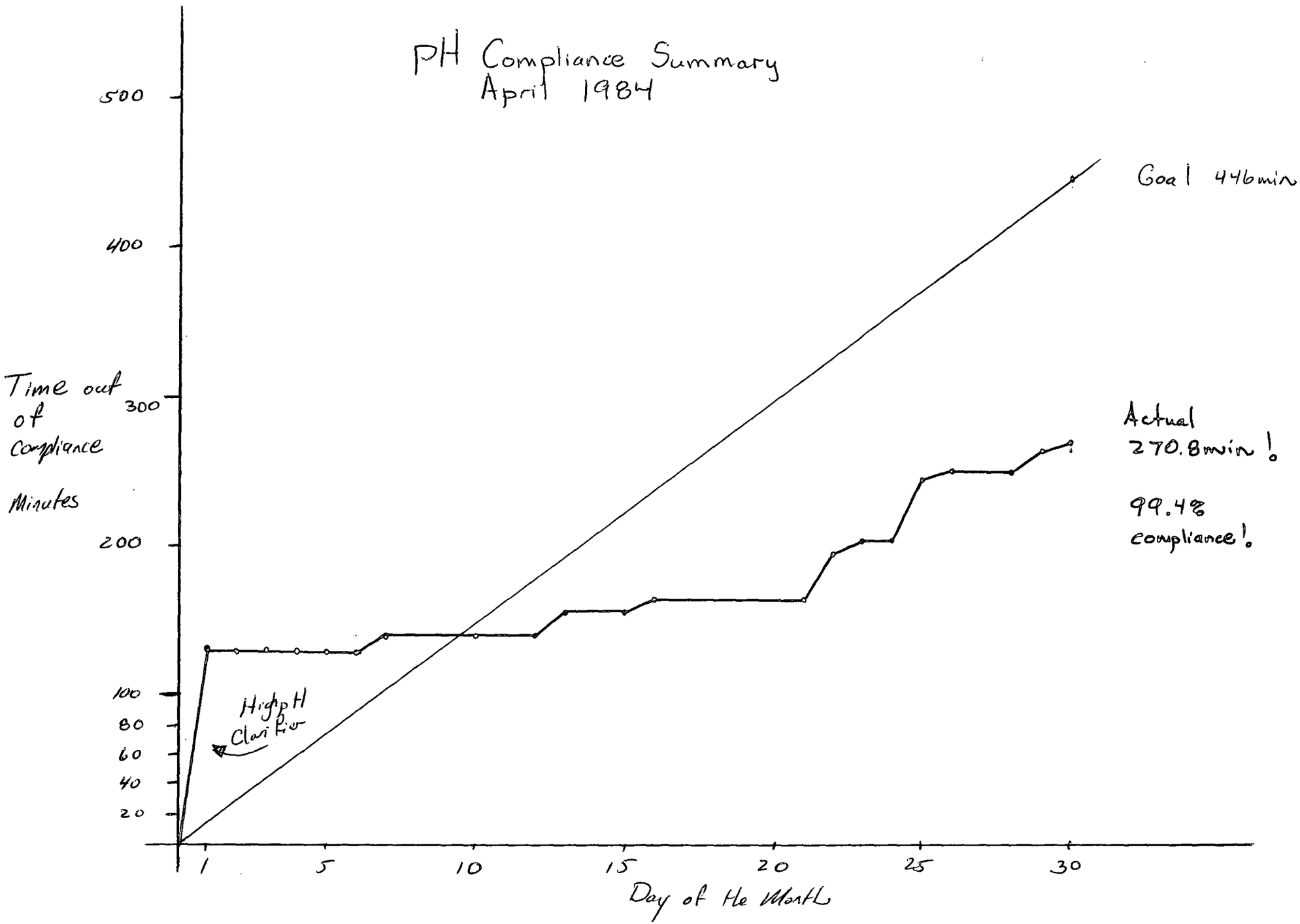
EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM 1 WHICH MAY NOT BE USED.)

PAGE 2 OF 2

SCOEPA00035302




SCOEPA00035303


pH Compliance Summary
April 1984
500
400
300
200
100
80
60
40
20
Time out of compliance Minutes
Goal 446min
Actual 270.8min !.
99.4% compliance !.
High pH Clarifier
1
5
10
15
20
25
30
Day of the Month

DWTP484 TIME OUT PRINT TO M124

| DY OF YR | OF pH SPECDY | OF MO | OWW TOT | COMB TOT | MV2 TOT | MV3 TOT | OWW FLOW | | COMB FLOW | MV2 FLOW | MV3 FLOW | OUTFALL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 91 | 0 | 1 | 246163 | 875100 | 1380452 | 2217148 | 403.41 | 1 | 770.14 | 346.71 | 506.81 | 1276.9493 |
| 92 | 127.9 | 2 | 256821 | 895447 | 1381368 | 2218487 | 379.79 | 2 | 1472.56 | 459.50 | 909.92 | 2382.4754 |
| 93 | 127.9 | 3 | 266855 | 934352 | 1382582 | 2220891 | 318.28 | 3 | 1447.27 | 522.33 | 840.65 | 2287.9258 |
| 94 | 127.9 | 4 | 275264 | 972589 | 1383962 | 2223112 | 352.76 | 4 | 1459.08 | 645.72 | 856.17 | 2315.2536 |
| 95 | 127.9 | 5 | 284584 | 1011138 | 1385668 | 2225374 | 304.84 | 5 | 1292.58 | 412.19 | 984.48 | 2277.0628 |
| 96 | 127.9 | 6 | 292638 | 1045288 | 1386757 | 2227975 | 329.18 | 6 | 1260.03 | 409.92 | 684.71 | 1944.7388 |
| 97 | 140 | 7 | 301335 | 1078578 | 1387840 | 2229784 | 274.26 | 7 | 552.84 | 373.96 | 743.38 | 1296.2150 |
| 98 | 140 | 8 | 308581 | 1093184 | 1388828 | 2231748 | 207.83 | 8 | 535.88 | 384.56 | 761.92 | 1297.8047 |
| 99 | 140 | 9 | 314072 | 1107342 | 1389844 | 2233761 | 321.84 | 9 | 1292.47 | 403.86 | 976.53 | 2269.0008 |
| 100 | 140 | 10 | 322575 | 1141489 | 1390911 | 2236341 | 342.54 | 10 | 1245.31 | 424.30 | 698.33 | 1943.6412 |
| 101 | 140.8 | 11 | 331625 | 1174390 | 1392032 | 2238186 | 407.76 | 11 | 1320.59 | 455.34 | 865.25 | 2185.8441 |
| 102 | 140.8 | 12 | 342398 | 1209280 | 1393235 | 2240472 | 367.45 | 12 | 1404.39 | 389.86 | 853.90 | 2258.2892 |
| 103 | 155.2 | 13 | 352106 | 1246384 | 1394265 | 2242728 | 330.13 | 13 | 1254.62 | 404.24 | 782.36 | 2036.9796 |
| 104 | 156.6 | 14 | 360828 | 1279531 | 1395333 | 2244795 | 335.84 | 14 | 707.53 | 305.83 | 666.54 | 1374.0727 |
| 105 | 156.6 | 15 | 369701 | 1298224 | 1396141 | 2246556 | 356.89 | 15 | 711.32 | 329.67 | 692.66 | 1403.9743 |
| 106 | 164.6 | 16 | 379130 | 1317017 | 1397012 | 2248386 | 328.88 | 16 | 1265.90 | 437.93 | 869.80 | 2135.6927 |
| 107 | 164.6 | 17 | 387819 | 1350462 | 1398169 | 2250684 | 386.64 | 17 | 1288.64 | 405.37 | 831.57 | 2120.2120 |
| 108 | 164.6 | 18 | 398034 | 1384508 | 1399240 | 2252881 | 435.24 | 18 | 1271.01 | 363.36 | 849.74 | 2120.7419 |
| 109 | 164.6 | 19 | 409533 | 1418088 | 1400200 | 2255126 | 551.74 | 19 | 1269.38 | 461.01 | 849.36 | 2118.7358 |
| 110 | 164.6 | 20 | 424110 | 1451625 | 1401418 | 2257370 | 409.95 | 20 | 1233.54 | 392.13 | 779.71 | 2013.2475 |
| 111 | 164.6 | 21 | 434941 | 1484215 | 1402454 | 2259430 | 264.23 | 21 | 690.88 | 316.05 | 932.25 | 1623.1264 |
| 112 | 195.1 | 22 | 441922 | 1502468 | 1403289 | 2261893 | 193.41 | 22 | 575.97 | 309.61 | 1015.14 | 1591.1052 |
| 113 | 203.4 | 23 | 447032 | 1517685 | 1404107 | 2264575 | 275.02 | 23 | 1430.58 | 392.13 | 618.09 | 2048.6752 |
| 114 | 203.4 | 24 | 454298 | 1555481 | 1405143 | 2266208 | 294.97 | 24 | 1234.10 | 450.04 | 877.74 | 2111.8471 |
| 115 | 243.1 | 25 | 462091 | 1588086 | 1406332 | 2268527 | 310.45 | 25 | 1245.31 | 367.52 | 888.34 | 2133.6488 |
| 116 | 251.3 | 26 | 470293 | 1620987 | 1407303 | 2270874 | 344.02 | 26 | 1230.05 | 418.62 | 953.07 | 2183.1188 |
| 117 | 253.9 | 27 | 479382 | 1653485 | 1408409 | 2273392 | 358.02 | 27 | 1244.13 | 378.88 | 772.14 | 2016.2755 |
| 118 | 253.9 | 28 | 488841 | 1686355 | 1409410 | 2275432 | 397.43 | 28 | 780.70 | 334.97 | 771.76 | 1552.4603 |
| 119 | 265 | 29 | 499341 | 1706981 | 1410295 | 2277471 | 408.97 | 29 | 629.03 | 293.34 | 604.84 | 1233.8759 |
| 120 | 265 | 30 | 510146 | 1723600 | 1411070 | 2279069 | 731.04 | 30 | 1247.84 | 366.39 | 797.12 | 2044.9659 |
| 121 | 270.8 | 1 | 529460 | 1756568 | 1412038 | 2281175 | | 1 | | | | |

| STREAM | COMBINED | OWW | MV2 | MV3 | OUTFALL |
|---|---|---|---|---|---|
| MAXIMUM FLOW M3/DY | 1472.56 | 731.04 | 645.72 | 1015.14 | 2382.48 |
| MINIMUM FLOW M3/DY | 535.88 | 193.41 | 293.34 | 506.81 | 1233.88 |
| AVERAGE FLOW M3/DY | 1112.12 | 357.43 | 398.51 | 807.81 | 1919.93 |
| MAXIMUM FLOW GPM | 270.15 | 134.11 | 118.46 | 186.23 | 437.07 |
| MINIMUM FLOW GPM | 98.31 | 35.48 | 53.81 | 92.98 | 226.36 |
| AVERAGE FLOW GPM | 204.02 | 65.57 | 73.11 | 148.20 | 352.22 |
| TOTAL FLOW GALLONS | 8813775.0 | 2832679.1 | 3158275.7 | 6402042.6 | 15215818. |
| DAILY FLOW GALLONS | 284315.32 | 91376.746 | 101879.86 | 206517.50 | 490832.83 |

Flow to City Sewer
5.98 mmgal

| DATE | OWW BOD | OWW TSS | METER VAULT THREE PHOSPHATE | METER VAULT THREE pH | METER VAULT THREE TEMP | COMBINED DISCHARGE pH | COMBINED DISCHARGE TEMP |
|---|---|---|---|---|---|---|---|
| 4/6 | 343 | 232 | <.1 | 5.4 | 20.2 | 6.8 | 17.3 |
| 4/13 | 410 | 68 | <.1 | 5.8 | 19.4 | 7.2 | 18.2 |
| 4/20 | 425 | 698 | <.1 | 6.1 | 20.7 | 6.7 | 18.5 |
| 4/27 | 528 | 74 | <.1 | 5.2 | 19.3 | 7.1 | 16.7 |
| AVERAGE | 426.5 | 268 | <.1 | 5.625 | 19.9 | 6.95 | 17.675 |

| DATE | LBS BOD IN OWW | LBS TSS |
|---|---|---|
| 0 | 248.94 | 168.38 |
| 0 | 298.43 | 49.50 |
| 0 | 384.14 | 630.90 |
| 0 | 416.79 | 58.41 |
| 0 | 0.00 | 0.00 |
| AVERAGE | 269.66019 | AVERAGE 181.43792 |
| AVERAGE TOTAL LBS/MO | 10419.28 | 6547.17 LBS/MO |

SCOEPA00035305

| DATE OF ANALYSIS | ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW PARAMETERS | * | BOD | TSS | CR 6+ | CR TOTAL | FLUORIDE |
|---|---|---|---|---|---|---|---|
| 6 | MG/L | * | 27 | 53 | .001 | .002 | 4.3 |
| OU | MG/L | * | 17.493772 | 34.339626 | 6.4792E-4 | .00129583 | 2.7860452 |
| | KG/DAY | * | 34.020818 | 66.781605 | .00126003 | .00252006 | 5.4181302 |
| | LBS/DAY | | 75.002294 | 147.22673 | .00277786 | .00555573 | 11.944810 |
| 13 | MG/L | * | 32 | 65 | .001 | .002 | 4.1 |
| OUTFALL | MG/L | * | 19.709460 | 40.034840 | 6.1592E-4 | .00123184 | 2.5252745 |
| | KG/DAY | * | 40.147767 | 81.550151 | .00125462 | .00250924 | 5.1439326 |
| | LBS/DAY | | 88.509767 | 179.78546 | .00276593 | .00553186 | 11.340314 |
| 20 | MG/L | * | 22 | 36 | .001 | .002 | 6 |
| OUTFALL | MG/L | * | 13.479601 | 22.057530 | 6.1271E-4 | .00122542 | 3.6762549 |
| | KG/D | * | 27.137774 | 44.407267 | .00123354 | .00246707 | 7.4012112 |
| | LBS/DAY | | 59.827937 | 97.900261 | .00271945 | .00543890 | 16.316710 |
| 27 | MG/L | * | 19 | 69 | .001 | .002 | 4.4 |
| OUTFALL | MG/L | * | 11.723860 | 42.576122 | 6.1705E-4 | .00123409 | 2.7149991 |
| | KG/DAY | * | 23.638531 | 85.845193 | .00124413 | .00248827 | 5.4741862 |
| | LBS/DAY | | 52.113506 | 189.25431 | .00274282 | .00548563 | 12.068391 |
| 5 | MG/L | * | | | | | |
| OUTFALL | MG/L | * | 0 | 0 | 0 | 0 | 0 |
| | KG/DAY | * | 0 | 0 | 0 | 0 | 0 |
| | LBS/DAY | | 0 | 0 | 0 | 0 | 0 |
| AVERAGE | MG/L COMBINED | | 25 | 55.75 | .001 | .002 | 4.7 |
| | MG/L OUTFALL | | 15.601673 | 34.752029 | 6.2340E-4 | .00124680 | 2.9256434 |
| 4 | KG/DAY | * | 31.236223 | 69.646054 | .00124808 | .00249616 | 5.8593651 |
| | LBS/DAY | | 68.863376 | 153.54169 | .00275152 | .00550303 | 12.917556 |
| MAXIMUM | MG/L COMBINED | | 32 | 69 | .001 | .002 | 6 |
| | MG/L OUTFALL | | 19.709460 | 42.576122 | 6.4792E-4 | .00129583 | 3.6762549 |
| | KG/D | * | 40.147767 | 85.845193 | .00126003 | .00252006 | 7.4012112 |
| MINIMUM | MG/L COMBINED | | 0 | 0 | 0 | 0 | 0 |
| | MG/L OUTFALL | | 0 | 0 | 0 | 0 | 0 |
| | KG/DAY | * | 0 | 0 | 0 | 0 | 0 |

| | | BOD MG/L | BOD KG/D | TSS MG/L | TSS KG/D | CR6+ MG/L | CR6+ KG/D | CR MG/L | CR KG/D | F- MG/L | F- KG/D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DATA SUMMARY FOR PLOTTING. | | 27 | 34.020818 | 53 | 66.781605 | .001 | .00126003 | .002 | .00252006 | 4.3 | 5.4181302 |
| | | 32 | 40.147767 | 65 | 81.550151 | .001 | .00125462 | .002 | .00250924 | 4.1 | 5.1439326 |
| | COMBINED | 22 | 27.137774 | 36 | 44.407267 | .001 | .00123354 | .002 | .00246707 | 6 | 7.4012112 |
| | EFFLUENT | 19 | 23.638531 | 69 | 85.845193 | .001 | .00124413 | .002 | .00248827 | 4.4 | 5.4741862 |
| | PARAMETERS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | OUTFALL | BOD MG/L | TSS MG/L | CR6+ MG/L | CR MG/L | F- MG/L |
|---|---|---|---|---|---|---|
| | PARAMETERS | 17.493772 | 34.339626 | 6.4792E-4 | .00129583 | 2.7860452 |
| | | 19.709460 | 40.034840 | 6.1592E-4 | .00123184 | 2.5252745 |
| | | 13.479601 | 22.057530 | 6.1271E-4 | .00122542 | 3.6762549 |
| | | 11.723860 | 42.576122 | 6.1705E-4 | .00123409 | 2.7149991 |
| | | 0 | 0 | 0 | 0 | 0 |

SCOEPA00035306

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 4-6-84
ANALYSTS: Elam

FACILITIES OP. SUPT.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 4/6 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲- 27 | + 343 | | | |
| TSS | mg/l | – | 15 | 30 | ▲- 53 | + 232 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲- 4.3 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲- <0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲- 0.002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.4 | ▲ 6.8 | |
| Temperature | °C | – | – | 27 | | | ▲ 20.2 | ▲ 17.3 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035307

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 4-13-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 4/13 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 32 | + 410 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 65 | + 68 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.1 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.8 | ▲ 7.2 | |
| Temperature | °C | – | – | 27 | | | ▲ 19.4 | ▲ 18.2 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035308

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 4-20-84
ANALYSTS: Elam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 4/20 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 22 | + 425 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 36 | + 698 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 6.0 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ < 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ < 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 6.1 | ▲ 6.7 | |
| Temperature | °C | – | – | 27 | | | ▲ 20.7 | ▲ 18.5 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035309

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 4-27-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 4/27 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲- 19 | + 528 | | | |
| TSS | mg/l | – | 15 | 30 | ▲- 69 | + 74 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲- 4.4 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲- <0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲- 0.002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.2 | ▲ 7.1 | |
| Temperature | °C | – | – | 27 | | | ▲ 19.3 | ▲ 16.7 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035310

Greg Carr

RECEIVED
MAY 15 1984
WACKER SILTRONIC
ENGINEERING

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if [illegible])

NAME: Wacker Siltronic Corp.
ADDRESS: PO Box 83180
Portland Or 97203
FACILITY: 7200 NW Front Ave
LOCATION: Portland, Or 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
# DISCHARGE MONITORING REPORT (DMR)

Form Approved
[illegible] No. 158-R0073

2834-J
93450

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR-003058-7 | 47 |

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 03 | 01 | TO | 84 | 03 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater Flow - MVI | SAMPLE MEASUREMENT | 1133 | 1594 | m³/d | — | — | — | — | — | Cont | totalizing |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | " | recorder |
| MVI BOD | SAMPLE MEASUREMENT | 32 | 67 | kg/d | 17.5 | 32 | 49 | mg/l | 3 | 1/7 | 24 HC |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | | " | " |
| TSS | SAMPLE MEASUREMENT | 30 | 67 | kg/d | 8 | 24 | 44 | mg/l | 2 | " | " |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | | " | " |
| Cr 6+ | SAMPLE MEASUREMENT | <.001 | <.001 | kg/d | <.001 | .001 | .002 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | .01 | .05 | | — | .002 | .05 | | | " | " |
| Cr Total | SAMPLE MEASUREMENT | .002 | .003 | kg/d | <.001 | .002 | .003 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | .2 | .5 | | — | .3 | 1.0 | | | " | " |
| Fluoride | SAMPLE MEASUREMENT | 3.9 | 6.0 | kg/d | 3.9 | 4.3 | 5.1 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6.0 | 20.0 | | | " | " |
| pH | SAMPLE MEASUREMENT | — | — | — | 3.0 | — | 11.1 | pH | 1 | Continuous | |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | units | | recorder | |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: J P Hanna / Dr Eng
TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: J Cary for J P Hanna

| TELEPHONE | | DATE | | |
|---|---|---|---|---|
| 503 | 243-1020 | 84 | 04 | 10 |
| AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

pH was within the range 6.0 to 9.0 99% of the time. Only 1 excursion was longer than 1 hour in duration. Total time out 441 minutes.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PAGE 1 OF 2

SCOEPA00035312

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if different)

NAME: [illegible] Sulfone Corp.
ADDRESS: 220 Guy, 2380
[illegible] Pond, Dr 29203
FACILITY: 2200 Old Ferry Rd
LOCATION: Pond Dr 29229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 158-R0073

(2-16) PERMIT NUMBER: 02-0030598-7
(17-19) DISCHARGE NUMBER: 47

2034 - J
9345

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 24 | 03 | 01 | TO | 34 | 03 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | (4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Blowdown Flow Meter Vault 3 | SAMPLE MEASUREMENT | 804 | 1057 | m³/d | — | — | — | — | — | 1/1 | Totalizing Recorder |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | | |
| Total $PO_4^{3-}$ | SAMPLE MEASUREMENT | <.01 | — | — | <.01 | .1 | .1 | mg/l | — | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | | 1/7 | Grab |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Sulfite Flow | SAMPLE MEASUREMENT | 1937 | 2413 | m³/d | — | — | — | — | — | 1/1 | Totalizing Recorder |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | 1/1 | |
| pH | SAMPLE MEASUREMENT | — | — | — | 6.5 | 7.9 | 7.8 | pH units | — | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | 1/7 | Grab |
| Temp | SAMPLE MEASUREMENT | — | — | — | 16.2 | 10.5 | 19.4 | °C | — | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | | 1/7 | Grab |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

J P Hamm / Dir. Engineering

TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years)

J P Hamm

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 803 | NUMBER 5437075

DATE: YEAR 94 | MO 04 | DAY 10

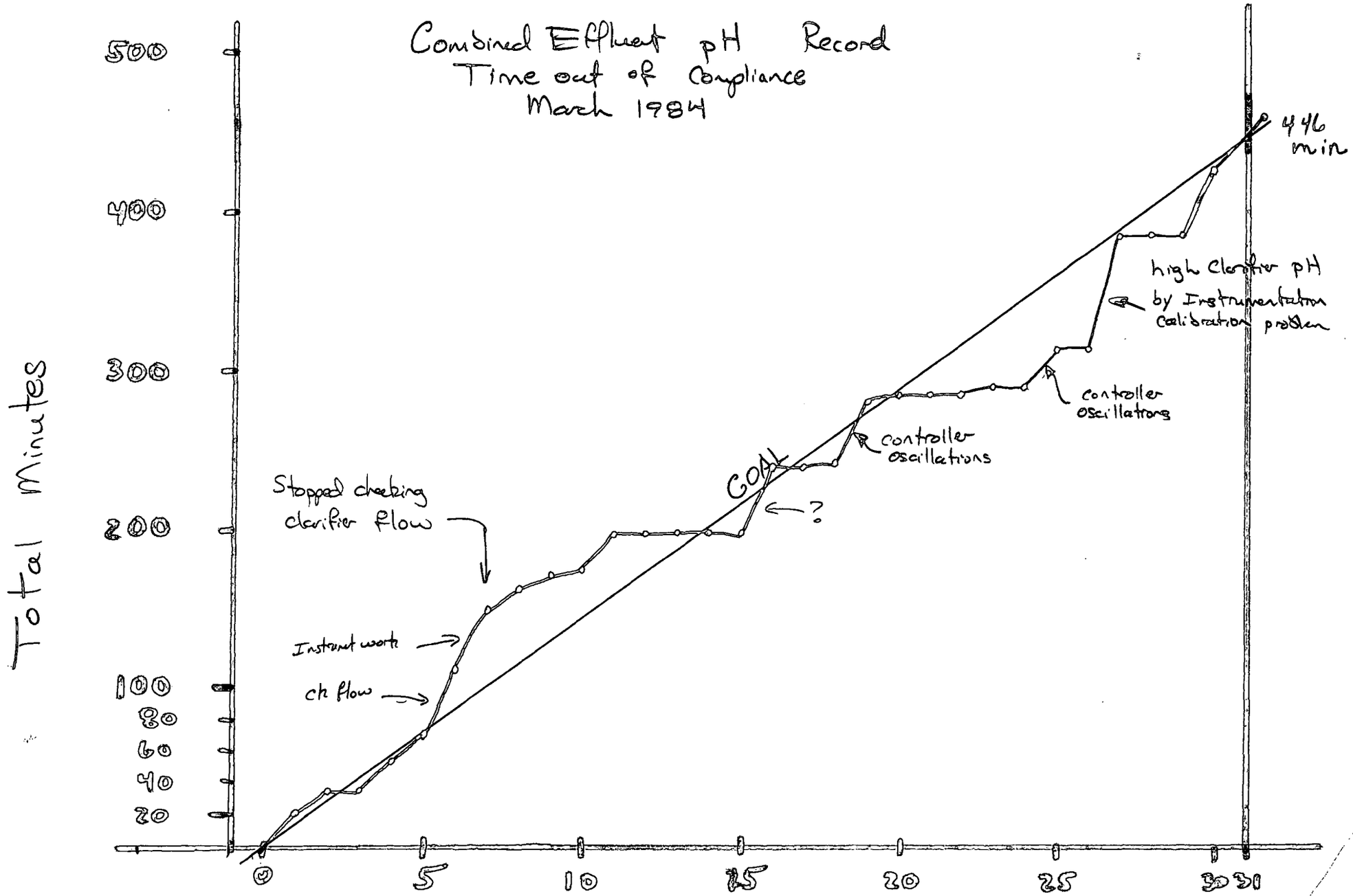
COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PLACE STAMP HERE

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PAGE 2 OF 2

SCOEPA00035313




SCOEPA00035314

# pH violations March 1984

| | length | pH | Cause | Time by counter |
|---|---|---|---|---|
| 3/1 (4) | 5-10 | 10.3 | ck flow? | 20.1 |
| 3/2 (1) | 5 | @ 6 | ck flow? + clean probes | 15.7 |
| 3/3 | ~10 | 4.9 | maintence of some sort | 0 |
| 3/4 | ~45 | 10.2 | Oscillations 7.0-10.0 | 18.2 |
| 3/5 | ~5 | 4.8/9.8 | ? ⏚ + clean probes | 17.8 |
| (2) | ~5 | 10.5 | ck flow? | ☆ |
| 3/6 (4) | 10, 25, 5 | 11.0 | ck flow? | 40.4 |
| 3/7 | 10 | 3.0 | Instrument work | 36.6 |
| 3/8 | ~12 | 10.0 | Oscillations 7.4-10.0 | 12.8 |
| 3/9 | ~10 | 10.9 | ? ⏚ + clean probes | 11.7 |
| 3/10 | <5 | 9.9 | oscillation? | 4.4 |
| 3/12 | ~10 | 10.4 | oscillation, switching from Taylor to prowx. | 11.9 |
| 3/13 | ~7 | 10.9 | ? check flow? + clean probes | .7 |
| 3/14 | clean probes | | | |
| 3/18 | ~40 | 11.1 | ? | 40.2 |
| | ~10 | 10.0 | ? + Clean probe | |
| 3/19 | ~5 | 10.8 | ? switch controllers | 42.1 |
| | ~40 min total | oscillations 6.0-10.0 | ? | |
| 3/20 | clean probes - too low CE pH | 3.0 | 25 min | 7.5 |
| 3/23 | clean probes | | | 4.7 |
| 3/26 (mid-6AM) | 4 series oscillations 7.4-9.6 | | | 20.5 |
| 3/27 | clean probes, high CE pH (alarm high due to probe) 1 hr 10 min 9.6 pH | | | 69.7 (1) |
| 3/29 | clean probes | | | 2.4 |
| 3/30 | | | | 43.9 |
| 3/31 | | 3.0/11.1 | | 28.3 |

min/max

Stopped ck flow

DWTP384 TIME OUT PRINT TO M125

| DY OF YR | OF pH SPECDY | OF MO | OWW TOT | COMB TOT | MV2 TOT | MV3 TOT | OWW FLOW | | COMB FLOW | MV2 FLOW | MV3 FLOW | OUTFALL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 61 | 0 | 1 | 32308 | 952296 | 1351241 | 2151333 | 217.26 | 1 | 1321.54 | 36.15 | 1059.42 | 2380.9614 |
| 62 | 20.1 | 2 | 38048 | 987211 | 1352196 | 2154132 | 206.74 | 2 | 1066.01 | 36.03 | 642.69 | 1708.7055 |
| 63 | 35.8 | 3 | 43510 | 1015375 | 1353148 | 2155830 | 108.59 | 3 | 451.48 | 31.26 | 745.27 | 1196.7449 |
| 64 | 35.8 | 4 | 46379 | 1027303 | 1353974 | 2157799 | 115.63 | 4 | 642.39 | 32.89 | 495.84 | 1138.2286 |
| 65 | 54 | 5 | 49434 | 1044275 | 1354843 | 2159109 | 303.33 | 5 | 1369.53 | 38.00 | 834.60 | 2204.1257 |
| 66 | 71.8 | 6 | 57448 | 1080458 | 1355847 | 2161314 | 276.53 | 6 | 1436.45 | 35.54 | 819.83 | 2256.2831 |
| 67 | 112.2 | 7 | 64754 | 1118409 | 1356786 | 2163480 | 222.82 | 7 | 1566.09 | 35.62 | 784.63 | 2350.7192 |
| 68 | 148.8 | 8 | 70641 | 1159785 | 1357727 | 2165553 | 248.90 | 8 | 1593.98 | 38.00 | 819.45 | 2413.4368 |
| 69 | 161.6 | 9 | 77217 | 1201898 | 1358731 | 2167718 | 185.62 | 9 | 1259.84 | 32.48 | 751.70 | 2011.5443 |
| 70 | 173.3 | 10 | 82121 | 1235183 | 1359589 | 2169704 | 102.12 | 10 | 518.81 | 29.90 | 630.96 | 1149.7729 |
| 71 | 177.7 | 11 | 84819 | 1248890 | 1360379 | 2171371 | 175.17 | 11 | 744.32 | 32.02 | 824.38 | 1568.6980 |
| 72 | 197.2 | 12 | 89447 | 1268555 | 1361225 | 2173549 | 261.66 | 12 | 1350.83 | 39.17 | 777.44 | 2128.2740 |
| 73 | 197.2 | 13 | 96360 | 1304244 | 1362260 | 2175603 | 232.70 | 13 | 1466.24 | 35.39 | 806.96 | 2273.2021 |
| 74 | 197.9 | 14 | 102508 | 1342982 | 1363195 | 2177735 | 240.50 | 14 | 1381.15 | 36.30 | 836.11 | 2217.2597 |
| 75 | 197.9 | 15 | 108862 | 1379472 | 1364154 | 2179944 | 341.90 | 15 | 1349.96 | 36.26 | 990.16 | 2340.1211 |
| 76 | 197.9 | 16 | 117895 | 1415138 | 1365112 | 2182560 | 296.86 | 16 | 1202.08 | 36.34 | 650.26 | 1852.3467 |
| 77 | 238.1 | 17 | 125738 | 1446897 | 1366072 | 2184278 | 271.61 | 17 | 767.15 | 30.73 | 1019.68 | 1786.8282 |
| 78 | 238.1 | 18 | 132914 | 1467165 | 1366884 | 2186972 | 313.21 | 18 | 872.37 | 31.53 | 506.06 | 1378.4254 |
| 79 | 243.5 | 19 | 141189 | 1490213 | 1367717 | 2188309 | 333.50 | 19 | 1353.29 | 34.67 | 857.31 | 2210.5980 |
| 80 | 280.2 | 20 | 150000 | 1525967 | 1368633 | 2190574 | 362.19 | 20 | 1302.01 | 43.57 | 1037.47 | 2339.4777 |
| 81 | 287.7 | 21 | 159569 | 1560366 | 1369784 | 2193315 | 341.98 | 21 | 1336.90 | 34.60 | 687.74 | 2024.6404 |
| 82 | 287.8 | 22 | 168604 | 1595687 | 1370698 | 2195132 | 324.94 | 22 | 1323.32 | 34.52 | 827.02 | 2150.3407 |
| 83 | 287.8 | 23 | 177189 | 1630649 | 1371610 | 2197317 | 278.12 | 23 | 1084.33 | 38.91 | 791.82 | 1876.1544 |
| 84 | 292.5 | 24 | 184537 | 1659297 | 1372638 | 2199409 | 236.00 | 24 | 548.49 | 31.64 | 669.57 | 1218.0545 |
| 85 | 292.5 | 25 | 190772 | 1673788 | 1373474 | 2201178 | 301.74 | 25 | 729.90 | 30.24 | 752.46 | 1482.3618 |
| 86 | 313 | 26 | 198744 | 1693072 | 1374273 | 2203166 | 245.27 | 26 | 1356.51 | 34.71 | 981.83 | 2338.3422 |
| 87 | 315.6 | 27 | 205224 | 1728911 | 1375190 | 2205760 | 384.14 | 27 | 1281.79 | 40.69 | 669.57 | 1951.3626 |
| 88 | 385.3 | 28 | 215373 | 1762776 | 1376265 | 2207529 | 322.90 | 28 | 1328.50 | 40.58 | 869.80 | 2198.2967 |
| 89 | 385.3 | 29 | 223904 | 1797875 | 1377337 | 2209827 | 323.32 | 29 | 1314.19 | 47.73 | 873.20 | 2187.3959 |
| 90 | 387.7 | 30 | 232446 | 1832596 | 1378598 | 2212134 | 288.80 | 30 | 1065.78 | 48.75 | 1054.50 | 2120.2877 |
| 91 | 431.6 | 31 | 240076 | 1860754 | 1379886 | 2214920 | 358.93 | 31 | 745.08 | 21.42 | 843.30 | 1588.3800 |
| 92 | 459.9 | 1 | 249559 | 1880439 | 1380452 | 2217148 | | 1 | | | | |

| STREAM | COMBINED | OWW | MV2 | MV3 | OUTFALL |
|---|---|---|---|---|---|
| MAXIMUM FLOW M3/DY | 1593.98 | 384.14 | 48.75 | 1059.42 | 2413.44 |
| MINIMUM FLOW M3/DY | 451.48 | 102.12 | 21.42 | 495.84 | 1138.23 |
| AVERAGE FLOW M3/DY | 1133.24 | 265.26 | 35.67 | 803.58 | 1936.82 |
| MAXIMUM FLOW GPM | 292.42 | 70.47 | 8.94 | 194.36 | 442.75 |
| MINIMUM FLOW GPM | 82.82 | 18.73 | 3.93 | 90.96 | 208.81 |
| AVERAGE FLOW GPM | 207.90 | 48.66 | 6.54 | 147.42 | 355.32 |
| TOTAL FLOW GALLONS | 9280477 | 2172287 | 292080 | 6580824 | 15861301 |
| DAILY FLOW GALLONS | 299370 | 70074 | 9422 | 212285 | 511655 |

| DATE | OWW | | METER VAULT THREE | | | COMBINED DISCHARGE | |
|---|---|---|---|---|---|---|---|
| | BOD | TSS | PHOSPHATE | pH | TEMP | pH | TEMP |
| 3/ 2 | 405 | 160 | .1 | 5.8 | 19.2 | 6.7 | 18.7 |
| 9 | 808 | 365 | .1 | 6.4 | 17.6 | 7.8 | 19.4 |
| 16 | 558 | 114 | .1 | 5.6 | 18.8 | 6.5 | 20.3 |
| 23 | 560 | 460 | .1 | 6.6 | 20.3 | 6.8 | 16.2 |
| 30 | 380 | 197 | .1 | 5.4 | 19.7 | 6.8 | 18.1 |
| AVERAGE | 542.2 | 259.2 | .1 | 5.96 | 19.12 | 6.92 | 18.54 |

| DATE | LBS BOD IN OWW | LBS TSS |
|---|---|---|
| 2 | 184.60 | 72.93 |
| 9 | 368.30 | 166.37 |
| 16 | 133.60 | 27.29 |
| 23 | 142.77 | 117.27 |
| 30 | 254.14 | 131.75 |
| AVERAGE | 216.68174 | AVERAGE 103.12445 |
| AVERAGE TOTAL LBS/MO | 9830.09 | 4699.30 LBS/MO |

SCOEPA00035316

| DATE OF ANALYSIS | ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW PARAMETERS | * | BOD | TSS | CR 6+ | CR TOTAL | FLUORIDE |
|---|---|---|---|---|---|---|---|
| 2 | MG/L | * | 26 | 44 | .001 | .001 | 4 |
| OUTFALL | MG/L | * | 16.220627 | 27.450292 | 6.2387E-4 | 6.2387E-4 | 2.4954811 |
| | KG/DAY | * | 27.716276 | 46.904466 | .00106601 | .00106601 | 4.2640424 |
| | LBS/DAY | | 61.103301 | 103.40559 | .00235013 | .00235013 | 9.4005079 |
| 2 | MG/L | * | 34 | 8 | .002 | .003 | 3.9 |
| OUTFALL | MG/L | * | 21.211590 | 4.9909623 | .00124774 | .00187161 | 2.4330941 |
| | KG/DAY | * | 36.244360 | 8.5280848 | .00213202 | .00319803 | 4.1574413 |
| | LBS/DAY | | 79.904317 | 18.801016 | .00470025 | .00705038 | 9.1654952 |
| 3 | MG/L | * | 17.5 | 12 | .001 | .002 | 5.1 |
| OUTFALL | MG/L | * | 6.6019356 | 4.5270416 | 3.7725E-4 | 7.5451E-4 | 1.9239927 |
| | KG/D | * | 7.9008327 | 5.4177139 | 4.5148E-4 | 9.0295E-4 | 2.3025284 |
| | LBS/DAY | | 17.418176 | 11.943892 | 9.9532E-4 | .00199065 | 5.0761541 |
| 4 | MG/L | * | 32 | 36 | .001 | .001 | 4 |
| OUTFALL | MG/L | * | 18.060122 | 20.317638 | 5.6438E-4 | 5.6438E-4 | 2.2575153 |
| | KG/DAY | * | 20.556548 | 23.126117 | 6.4239E-4 | 6.4239E-4 | 2.5695685 |
| | LBS/DAY | | 45.318966 | 50.983837 | .00141622 | .00141622 | 5.6648707 |
| 5 | MG/L | * | 49 | 20 | .001 | .002 | 4.4 |
| OUTFALL | MG/L | * | 30.446087 | 12.426974 | 6.2135E-4 | .00124270 | 2.7339344 |
| | KG/DAY | * | 67.107002 | 67.107002 | .00136953 | .00273906 | 6.0259349 |
| | LBS/DAY | | 147.94410 | 147.94410 | .00301927 | .00603853 | 13.284776 |
| AVERAGE | MG/L COMBINED | | 31.7 | 24 | .0012 | .0018 | 4.28 |
| | MG/L OUTFALL | | 18.508072 | 13.942582 | 6.8692E-4 | .00101141 | 2.3688035 |
| 5 | KG/DAY | * | 31.905004 | 30.216677 | .00113229 | .00170969 | 3.8639031 |
| | LBS/DAY | | 70.337771 | 66.615686 | .00249624 | .00376918 | 8.5183608 |
| MAXIMUM | MG/L COMBINED | | 49 | 44 | .002 | .003 | 5.1 |
| | MG/L OUTFALL | | 30.446087 | 27.450292 | .00124774 | .00187161 | 2.7339344 |
| | KG/D | * | 67.107002 | 67.107002 | .00213202 | .00319803 | 6.0259349 |
| MINIMUM | MG/L COMBINED | | 17.5 | 8 | .001 | .001 | 3.9 |
| | MG/L OUTFALL | | 6.6019356 | 4.5270416 | 3.7725E-4 | 5.6438E-4 | 1.9239927 |
| | KG/DAY | * | 7.9008327 | 5.4177139 | 4.5148E-4 | 6.4239E-4 | 2.3025284 |

*

| DATA SUMMARY FOR PLOTTING. | BOD MG/L | BOD KG/D | TSS MG/L | TSS KG/D | CR6+ MG/L | CR6+ KG/D | CR MG/L | CR KG/D | F- MG/L | F- KG/D |
|---|---|---|---|---|---|---|---|---|---|---|
| | 26 | 27.716276 | 44 | 46.904466 | .001 | .00106601 | .001 | .00106601 | 4 | 4.2640424 |
| | 34 | 36.244360 | 8 | 8.5280848 | .002 | .00213202 | .003 | .00319803 | 3.9 | 4.1574413 |
| COMBINED | 17.5 | 7.9008327 | 12 | 5.4177139 | .001 | 4.5148E-4 | .002 | 9.0295E-4 | 5.1 | 2.3025284 |
| EFFLUENT | 32 | 20.556548 | 36 | 23.126117 | .001 | 6.4239E-4 | .001 | 6.4239E-4 | 4 | 2.5695685 |
| PARAMETERS | 49 | 67.107002 | 20 | 67.107002 | .001 | .00136953 | .002 | .00273906 | 4.4 | 6.0259349 |

| OUTFALL PARAMETERS | BOD MG/L | TSS MG/L | CR6+ MG/L | CR MG/L | F- MG/L |
|---|---|---|---|---|---|
| | 16.220627 | 27.450292 | 6.2387E-4 | 6.2387E-4 | 2.4954811 |
| | 21.211590 | 4.9909623 | .00124774 | .00187161 | 2.4330941 |
| | 6.6019356 | 4.5270416 | 3.7725E-4 | 7.5451E-4 | 1.9239927 |
| | 18.060122 | 20.317638 | 5.6438E-4 | 5.6438E-4 | 2.2575153 |
| | 30.446087 | 12.426974 | 6.2135E-4 | .00124270 | 2.7339344 |

SCOEPA00035317

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 3-2-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 3/2/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲- 26 | + 405 | | | |
| TSS | mg/l | – | 15 | 30 | ▲- 44 | + 160 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲- 4.0 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲- < 0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲- 0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ < 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.8 | ▲ 6.7 | |
| Temperature | °C | – | – | 27 | | | ▲ 19.2 | ▲ 18.7 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035318

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 3-9-84
ANALYSTS: Elam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 3/9/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 34 | + 808 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 8 | + 365 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 3.9 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ 0.002 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.003 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ < 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 6.4 | ▲ 7.8 | |
| Temperature | °C | – | – | 27 | | | ▲ 17.6 | ▲ 19.4 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035319

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 3-16-84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 3/16/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 17.5 | + 558 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 12 | + 114 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 5.1 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.6 | ▲ 6.5 | |
| Temperature | °C | – | – | 27 | | | ▲ 18.8 | ▲ 20.3 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS BOD's incubated at ambient temperature due to incubator malfunction

SCOEPA00035320

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 3-23-84
ANALYSTS: Eliam

FACILITIES OP. SUPT.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 3/23/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 32 | + 560 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 36 | + 460 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.0 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.001 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 6.6 | ▲ 6.8 | |
| Temperature | °C | – | – | 27 | | | ▲ 20.3 | ▲ 16.2 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS BOD's incubated at ambient temperature due to incubator malfunction

SCOEPA00035321

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 3-30-84
ANALYSTS: Eliam

FACILITIES OP. SUPR
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 3/30/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 49 | + 380 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 20 | + 197 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.4 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.001 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ 0.002 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.4 | ▲ 6.8 | |
| Temperature | °C | – | – | 27 | | | ▲ 19.7 | ▲ 18.1 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS BOD's incubated at ambient temperature due to incubator malfunction

SCOEPA00035322

Greg Carr

RECEIVED
APR 10 1994
WACKER SILTRONIC
ENGINEERING

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location [illegible])

NAME: [illegible] Corp
ADDRESS: [illegible] 93180
Portland Or 97203
FACILITY: 2200 [illegible] Front Ave
LOCATION: Portland Or 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
# DISCHARGE MONITORING REPORT (DMR)

Form Approved
[illegible] No. 158-R0073

| (2-16) | (17-19) |
|---|---|
| OR-003058-7 | 46 |
| PERMIT NUMBER | DISCHARGE NUMBER |

2834-J
93450

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 02 | 01 | TO | 84 | 02 | 29 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater Flow MV 1 | SAMPLE MEASUREMENT | 1178 | 1561 | m3/d | — | — | — | — | — | cont. | totalizing |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | cont. | recorder |
| MV 1 BOD | SAMPLE MEASUREMENT | 46.5 | 51.7 | kg/d | 27 | 38 | 53 | mg/l | 4 | 1/7 | 24 Hr |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | | " | " |
| TSS | SAMPLE MEASUREMENT | 59.0 | 114.7 | kg/d | 12 | 49 | 112 | mg/l | 2 | " | " |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | | " | " |
| Cr 6+ | SAMPLE MEASUREMENT | <.006 | .012 | kg/d | <.01 | <.01 | .01 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | .01 | .05 | | — | .08 | .05 | | | " | " |
| Cr, Total | SAMPLE MEASUREMENT | <.006 | .013 | kg/d | <.01 | <.01 | .01 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | .2 | .5 | | — | [illegible] | 1.0 | | | " | " |
| Fluoride | SAMPLE MEASUREMENT | 5.9 | 10.0 | kg/d | 3.8 | 4.9 | 7.2 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | — | 6.0 | 20.0 | | | " | " |
| pH | SAMPLE MEASUREMENT | — | — | — | 2.0 | — | 12.1 | pH units | 4 | continuous | |
| | PERMIT REQUIREMENT | — | — | | 6.0 | | 9.0 | | | recorder | |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: J.P. H[illegible] Dir Eng
TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: [signature]

| TELEPHONE | | DATE | | |
|---|---|---|---|---|
| 503 | 243-2020 | 84 | 03 | 12 |
| AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Total time out of compliance on pH - 1880.5 minutes, or 45% of the time. See attached letter

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)



SCOEPA00035324

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location [illegible]rent)

NAME Wacker Siltronic Corporation
ADDRESS PO Box 03180
Portland, OR 97203
FACILITY [illegible] Nw Front Ave
LOCATION Portland OR 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
[illegible] No. 158-R0073

Z834-J
93450

| (2-16) | (17-19) |
|---|---|
| OR-003058-7 | 46 |
| PERMIT NUMBER | DISCHARGE NUMBER |

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 02 | 01 | TO | 84 | 02 | 29 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Blowdown Flow Meter Vault 3 | SAMPLE MEASUREMENT | 751 | 1205 | m³/d | — | — | — | | — | 1/1 | totalizing |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | " | recorder |
| Meter Vault 3 total $PO_3^{3-}$ | SAMPLE MEASUREMENT | — | — | — | <.01 | <.1 | .1 | mg/l | 0 | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | 5.0 | 5.0 | | — | " | " |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Outfall Flow | SAMPLE MEASUREMENT | 1929 | 2416 | m³/d | — | — | — | | — | 1/1 | totaling |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | " | recorder |
| Outfall pH | SAMPLE MEASUREMENT | — | — | — | 6.2 | 6.9 | 7.8 | pH | 0 | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | units | — | 1/7 | Grab |
| Outfall Temp | SAMPLE MEASUREMENT | — | — | — | 17.3 | 18.0 | 18.7 | °C | 0 | " | " |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | — | " | " |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
J Pittman Dir Engineering
TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

| TELEPHONE | | DATE | | |
|---|---|---|---|---|
| 503 | 243-2020 | 84 | 03 | 12 |
| AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)



SCOEPA00035325

DWTP284 PRINT TO M124

| DY OF YR | MO OF YR | DY OF MO | OWW TOT | COMB TOT | MV2 TOT | MV3 TOT | OWW FLOW | | COMB FLOW | MV2 FLOW | MV3 FLOW | OUTFALL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 | 2 | 1 | 802176 | 50709 | 1325357 | 2093789 | 378.84 | 1 | 1561.36 | 34.37 | 769.49 | 2330.8478 | 1 |
| 33 | 2 | 2 | 812185 | 91960 | 1326265 | 2095822 | 250.00 | 2 | 1536.11 | 33.27 | 799.02 | 2335.1249 | 2 |
| 34 | 2 | 3 | 818790 | 132544 | 1327144 | 2097933 | 282.29 | 3 | 1291.71 | 37.59 | 799.02 | 2090.7267 | 3 |
| 35 | 2 | 4 | 826248 | 166671 | 1328137 | 2100044 | 424.72 | 4 | 761.13 | 31.87 | 836.11 | 1597.2369 | 4 |
| 36 | 2 | 5 | 837469 | 186780 | 1328979 | 2102253 | 1399.17 | 5 | 1077.33 | 35.28 | 568.13 | 1645.4580 | 5 |
| 37 | 2 | 6 | 874435 | 215243 | 1329911 | 2103754 | 567.15 | 6 | 1446.78 | 36.37 | 858.82 | 2305.6018 | 6 |
| 38 | 2 | 7 | 889419 | 253467 | 1330872 | 2106023 | 555.49 | 7 | 1433.65 | 35.28 | 900.08 | 2333.7245 | 7 |
| 39 | 2 | 8 | 904095 | 291344 | 1331804 | 2108401 | 347.35 | 8 | 1410.37 | 37.59 | 718.40 | 2128.7661 | 8 |
| 40 | 2 | 9 | 913272 | 328606 | 1332797 | 2110299 | 265.59 | 9 | 1377.02 | 40.50 | 718.02 | 2095.0416 | 9 |
| 41 | 2 | 10 | 920289 | 364987 | 1333867 | 2112196 | 215.93 | 10 | 1384.14 | 33.84 | 747.54 | 2131.6805 | 10 |
| 42 | 2 | 11 | 925994 | 401556 | 1334761 | 2114171 | 144.25 | 11 | 1028.96 | 29.26 | 719.91 | 1748.8645 | 11 |
| 43 | 2 | 12 | 929805 | 428741 | 1335534 | 2116073 | 142.28 | 12 | 898.60 | 30.51 | 876.99 | 1775.5867 | 12 |
| 44 | 2 | 13 | 933564 | 452482 | 1336340 | 2118390 | 250.26 | 13 | 1418.47 | 35.88 | 876.99 | 2295.4580 | 13 |
| 45 | 2 | 14 | 940176 | 489958 | 1337288 | 2120707 | 251.78 | 14 | 1433.27 | 35.62 | 640.42 | 2073.6942 | 14 |
| 46 | 2 | 15 | 946828 | 527825 | 1338229 | 2122399 | 226.76 | 15 | 1386.22 | 31.91 | 726.34 | 2112.5662 | 15 |
| 47 | 2 | 16 | 952819 | 564449 | 1339072 | 2124318 | 231.98 | 16 | 1406.51 | 34.14 | 767.98 | 2174.4890 | 16 |
| 48 | 2 | 17 | 958948 | 601609 | 1339974 | 2126347 | 215.44 | 17 | 1053.60 | 31.04 | 768.36 | 1821.9531 | 17 |
| 49 | 2 | 18 | 964640 | 629445 | 1340794 | 2128377 | 84.14 | 18 | 614.23 | 28.08 | 767.98 | 1382.2104 | 18 |
| 50 | 2 | 19 | 966863 | 645673 | 1341536 | 2130406 | 80.89 | 19 | 707.99 | 29.11 | 414.46 | 1122.4451 | 19 |
| 51 | 2 | 20 | 969000 | 664378 | 1342305 | 2131501 | 83.61 | 20 | 289.59 | 27.52 | 629.83 | 919.41711 | 20 |
| 52 | 2 | 21 | 971209 | 672029 | 1343032 | 2133165 | 691.14 | 21 | 1500.04 | 33.16 | 698.71 | 2198.7509 | 21 |
| 53 | 2 | 22 | 989469 | 711660 | 1343908 | 2135011 | 231.45 | 22 | 1336.22 | 34.29 | 776.68 | 2112.9069 | 22 |
| 54 | 2 | 23 | 995584 | 746963 | 1344814 | 2137063 | 228.92 | 23 | 1555.30 | 34.63 | 795.23 | 2350.5299 | 23 |
| 55 | 2 | 24 | 1001632 | 788054 | 1345729 | 2139164 | 171.01 | 24 | 987.93 | 34.60 | 757.00 | 1744.9281 | 24 |
| 56 | 2 | 25 | 1006150 | 814155 | 1346643 | 2141164 | 119.68 | 25 | 768.66 | 32.06 | 659.73 | 1428.3876 | 25 |
| 57 | 2 | 26 | 1009312 | 834463 | 1347490 | 2142907 | 156.96 | 26 | 644.02 | 47.35 | 695.31 | 1339.3263 | 26 |
| 58 | 2 | 27 | 1013459 | 851478 | 1348741 | 2144744 | 247.73 | 27 | 1210.98 | 24.11 | 1204.77 | 2415.7456 | 27 |
| 59 | 2 | 28 | 1020004 | 883472 | 1349378 | 2147927 | 249.02 | 28 | 1345.91 | 36.75 | 443.22 | 1789.1370 | 28 |
| 60 | 2 | 29 | 1026583 | 919031 | 1350349 | 2149098 | 216.69 | 29 | 1300.72 | 33.76 | 845.95 | 2146.6692 | 29 |
| 61 | 2 | 1 | 1032308 | 953396 | 1351241 | 2151333 | | 1 | | | | | |

| STREAM | COMBINED | OWW | MV2 | MV3 | OUTFALL |
|---|---|---|---|---|---|
| MAXIMUM FLOW M3/DY | 1561.36 | 1399.17 | 47.35 | 1204.77 | 2415.75 |
| MINIMUM FLOW M3/DY | 289.59 | 80.89 | 24.11 | 414.46 | 919.42 |
| AVERAGE FLOW M3/DY | 1178.17 | 300.36 | 33.78 | 751.05 | 1929.22 |
| MAXIMUM FLOW GPM | 286.44 | 256.68 | 8.69 | 221.02 | 443.18 |
| MINIMUM FLOW GPM | 53.13 | 14.84 | 4.42 | 76.03 | 168.67 |
| AVERAGE FLOW GPM | 216.14 | 55.10 | 6.20 | 137.78 | 353.92 |
| TOTAL FLOW GALLONS | 9025943.2 | 2301083.7 | 258813.43 | 5753809.2 | 14779752. |
| DAILY FLOW GALLONS | 291159.46 | 74228.507 | 8348.8202 | 185606.75 | 476766.21 |

| DATE | OWW | | METER VAULT THREE | | COMBINED DISCHARGE | | |
|---|---|---|---|---|---|---|---|
| | BOD | TSS | PHOSPHATE | pH | TEMP | pH | TEMP |
| 3 | 677 | 301 | < .1 | 5.3 | 18.2 | 6.4 | 17.1 |
| 10 | 337 | 283 | .1 | 6.2 | 18.7 | 7.8 | 16.2 |
| 17 | 408 | 178 | < .1 | 4.8 | 17.7 | 6.2 | 18.5 |
| 24 | 415 | 223 | < .1 | 5.4 | 17.3 | 7.1 | 18.5 |
| AVERAGE | 459.25 | 246.25 | .025 | 5.425 | 17.975 | 6.875 | 17.575 |

| DATE | LBS BOD IN OWW | LBS TSS |
|---|---|---|
| 3 | 421.35 | 187.34 |
| 10 | 160.44 | 134.73 |
| 17 | 193.80 | 84.55 |
| 24 | 156.47 | 84.08 |
| AVERAGE | 233.01776 | AVERAGE 122.67565 |
| AVERAGE TOTAL LBS/MO | 9428.15 | 5055.37 LBS/MO |

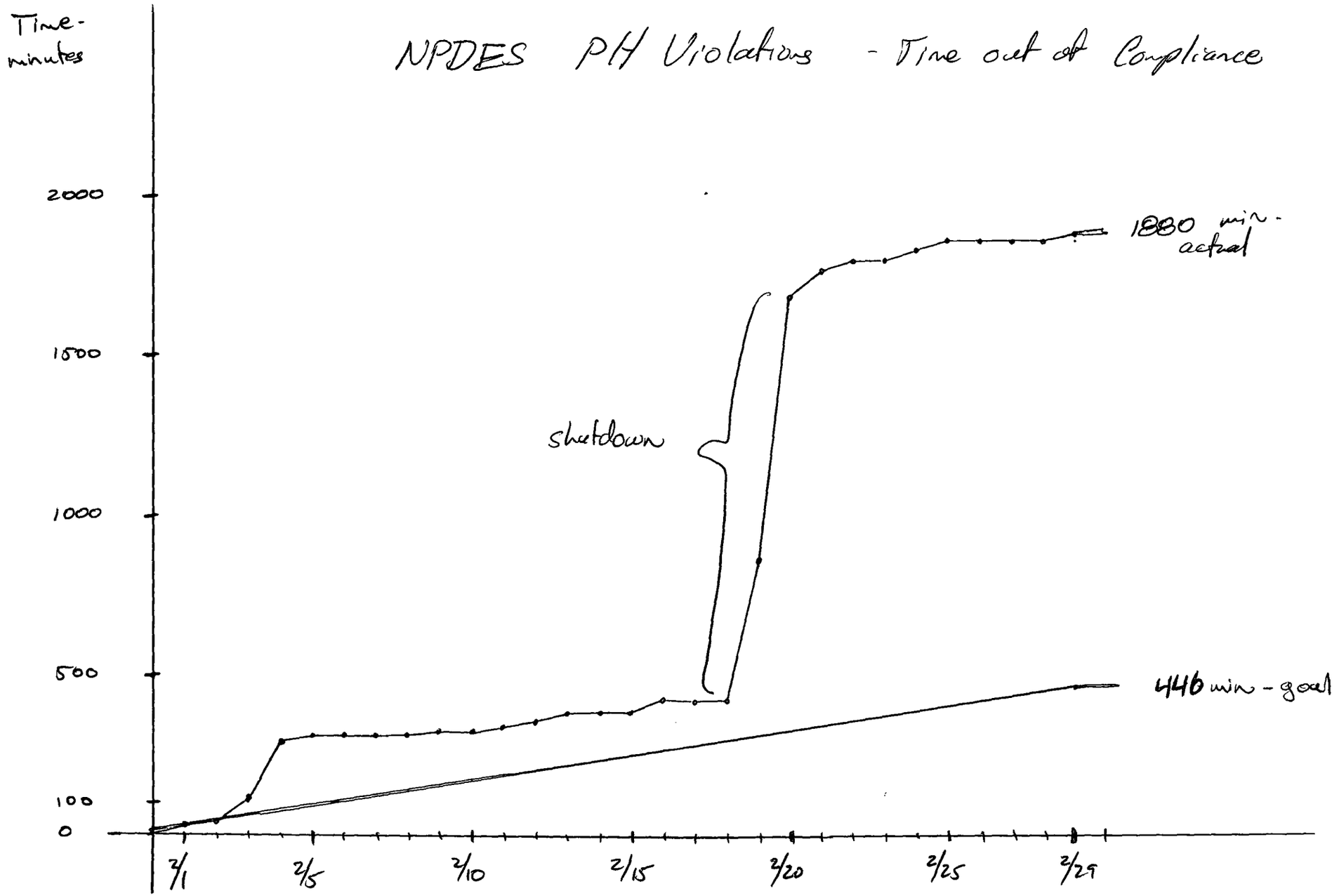
SCOEPA00035326

| DATE OF ANALYSIS | ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW PARAMETERS | * | BOD | TSS | CR 6+ | CR TOTAL | FLUORIDE | EFFLUENT FLOW |
|---|---|---|---|---|---|---|---|---|
| 3 | MG/L | * | 40 | 112 | .01 | .01 | 4.5 | 1291.7108 |
| OUTFALL | MG/L | * | 24.713145 | 69.196806 | .00617829 | .00617829 | 2.7802288 | .61782863 |
| | KG/DAY | * | 51.668433 | 144.67161 | .01291711 | .01291711 | 5.8126987 | 282.28615 |
| | LBS/DAY | | 113.90823 | 318.94304 | .02847706 | .02847706 | 12.814676 | |
| 10 | MG/L | * | 53 | 17 | .01 | .01 | 7.2 | 1384.1408 |
| OUTFALL | MG/L | * | 34.413910 | 11.038424 | .00649319 | .00649319 | 4.6750972 | .64931906 |
| | KG/DAY | * | 73.359463 | 23.530394 | .01384141 | .01384141 | 9.9658138 | 215.93490 |
| | LBS/DAY | | 161.72827 | 51.875106 | .03051477 | .03051477 | 21.970633 | |
| 17 | MG/L | * | 27 | 12 | .01 | .01 | 3.8 | 1053.5958 |
| OUTFALL | MG/L | * | 15.613512 | 6.9393385 | .00578278 | .00578278 | 2.1974572 | .57827821 |
| | KG/D | * | 28.447086 | 12.643149 | .01053596 | .01053596 | 4.0036639 | 215.44285 |
| | LBS/DAY | | 62.714445 | 27.873087 | .02322757 | .02322757 | 8.8264774 | |
| 24 | MG/L | * | 33 | 56 | .01 | .01 | 4 | 987.92581 |
| OUTFALL | MG/L | * | 18.683608 | 31.705516 | .00566170 | .00566170 | 2.2646797 | .56616993 |
| | KG/DAY | * | 32.601552 | 55.323846 | .00987926 | .00987926 | 3.9517033 | 171.00681 |
| | LBS/DAY | | 71.873381 | 121.96695 | .02177981 | .02177981 | 8.7119250 | |
| AVERAGE | MG/L COMBINED | | 38.25 | 49.25 | .01 | .01 | 4.875 | |
| | MG/L OUTFALL | | 23.356044 | 29.720021 | .00602899 | .00602899 | 2.9793657 | |
| 4 | KG/DAY | * | 46.519133 | 59.042250 | .01179343 | .01179343 | 5.9334699 | |
| | LBS/DAY | | 102.55608 | 130.16454 | .02599980 | .02599980 | 13.080928 | 0 |
| MAXIMUM | MG/L COMBINED | | 53 | 112 | .01 | .01 | 7.2 | |
| | MG/L OUTFALL | | 24.713145 | 69.196806 | .00617829 | .00617829 | 2.7802288 | |
| | KG/D | * | 51.668433 | 144.67161 | .01291711 | .01291711 | 5.8126987 | |
| MINIMUM | MG/L COMBINED | | 40 | 112 | .01 | .01 | 4.5 | |
| | MG/L OUTFALL | | 24.713145 | 69.196806 | .00617829 | .00617829 | 2.7802288 | |
| | KG/DAY | * | 51.668433 | 144.67161 | .01291711 | .01291711 | 5.8126987 | |

| | * | BOD MG/L | BOD KG/D | TSS MG/L | TSS KG/D | CR6+ MG/L | CR6+ KG/D | CR MG/L | CR KG/D | F- MG/L | F- KG/D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DATA SUMMARY FOR PLOTTING. | | 40 | 51.668433 | 112 | 144.67161 | .01 | .01291711 | .01 | .01291711 | 4.5 | 5.8126987 |
| | | 53 | 73.359463 | 17 | 23.530394 | .01 | .01384141 | .01 | .01384141 | 7.2 | 9.9658138 |
| COMBINED | | 27 | 28.447086 | 12 | 12.643149 | .01 | .01053596 | .01 | .01053596 | 3.8 | 4.0036639 |
| EFFLUENT | | 33 | 32.601552 | 56 | 55.323846 | .01 | .00987926 | .01 | .00987926 | 4 | 3.9517033 |

| OUTFALL PARAMETERS | BOD MG/L | TSS MG/L | CR6+ MG/L | CR MG/L | F- MG/L |
|---|---|---|---|---|---|
| | 24.713145 | 69.196806 | .00617829 | .00617829 | 2.7802288 |
| | 34.413910 | 11.038424 | .00649319 | .00649319 | 4.6750972 |
| | 15.613512 | 6.9393385 | .00578278 | .00578278 | 2.1974572 |
| | 18.683608 | 31.705516 | .00566170 | .00566170 | 2.2646797 |

SCOEPA00035327


NPDES PH Violations - Time out of Compliance
Time-minutes
2000
1500
1000
500
100
0
1880 min - actual
shutdown
446 min - goal
2/1
2/5
2/10
2/15
2/20
2/25
2/29

# February 1984 NPDES Violation Summary - pH

| | Chart | | |
|---|---|---|---|
| 2/1 | 26.4 min | 10.6 | ck clarifier flow 4 times |
| 2/2 | 13.0 min | 10.3 | ck clarifier flow 2 times |
| 2/3 | 75.8 min | 11.3 / 2.3 | ck clarifier 10 min rest |
| ~~2/4~~ | 173.8 min | 3.8 / 11.1 | by my count ~140° ? (1) |
| 2/5 | 20.0 min | 3.6 / 9.6 | ? |
| 2/6 | 11.9 min | 4.0 / 10.5 | ck clarifier flow ~~2~~ 2 times |
| 2/7 | 7.1 min | 5.9 | low pH blip from clarifier, ck flow once |
| 2/8 | 2.2 min | 9.1 | ck clarifier once |
| 2/9 | ∅ | | |
| 2/10 | 6.1 min | 10.9 | ck clarifier flow 2 xs |
| 2/11 | 5.2 min | 9.9 | ck clarifier flow once |
| 2/12 | 8.8 min | 9.7 | ck " " once |
| 2/13 | 24.8 min | 11.2 / 3.9 | Calibrate pH probes - entire time! |
| 2/14 | 7.5 min | 9.1 | high clarifier pH, WAD combin compensate |
| 2/15 | ∅ | | |
| 2/16 | 24.2 min | 10.7 | ck clarifier flow twice |
| 2/17 | ∅ | | |
| 2/18 | ∅ | | |
| 2/19 | 448.9 min | 2.0 / ~~2.5~~ 12.1 | low flow, clarifier high pH, due to shutdown (1) |
| 2/20 | 829.7 min | 2.5 / 12.1 | shutdown (2) |
| 2/21 | 78.3 min | 2.5 / 10.0 | high clarifier pH, flow fluctuates |
| 2/22 | 27.8 min | 4.0 / 9.6 | " " |
| 2/23 | ∅ | | |
| 2/24 | 25 min | 5.3 / 10.3 | pH probe calibrate & ck flows |
| 2/25 | ~~3~~ 3 min | 3.8 / 9.9 | ? ck flows ? |
| 2/26 | ∅ | | |
| 2/27 | 3.1 min | 9.5 | ck clarifier flow 1 time |
| 2/28 | 2.9 min | 9.1 | " " " " |
| 2/29 | 25 min | 11.1 | ck clarifier flow & calibrate pH probes. |

1880.5 min — 4.50% of the time
less shutdown, 1.44% of the time

| | | % of the time |
|---|---|---|
| Checking clarifier flow | 125.9 min | .3% |
| Calibrate pH probes | 64.8 min | .15% |
| Shut-down | 1,278.6 min | 3.06% |
| high clarifier pH / flow variations unknown | 133.9 min | .32% |
| | 277.3 min | .66% |

4 violations longer than 60 minutes

SCOEPA00035329

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 2/3/84
ANALYSTS: Eliam

(5)

FACILITIES MGR.
FACILITIES OP SUPR
ENVIRONMENTAL ENG
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 2-3-84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 40 | + 677 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 112 | + 301 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.5 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.01 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ <0.01 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.3 | ▲ 6.4 | |
| Temperature | °C | – | – | 27 | | | ▲ 18.2 | ▲ 17.1 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035330

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 2/10/84
ANALYSTS: Eliam

(6) FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 2-10-84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲- 53 | + 337 | | | |
| TSS | mg/l | – | 15 | 30 | ▲- 17 | + 283 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲- 7.2 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲- <0.01 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲- <0.01 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 6.2 | ▲ 7.8 | |
| Temperature | °C | – | – | 27 | | | ▲ 18.7 | ▲ 16.2 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035331

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 2/17/84
ANALYSTS: Eliam

FACILITIES OP. SUPR.
(7) ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 2-17-84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 27 | + 408 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 12 | + 178 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 3.8 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.01 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ <0.01 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 4.8 | ▲ 6.2 | |
| Temperature | °C | – | – | 27 | | | ▲ 17.7 | ▲ 18.5 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035332

WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 2/24/84
ANALYSTS: Eliam

(8)
FACILITIES OP. SUPR.
ENVIRONMENTAL ENGR.
FILE

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 2-24-84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 33 | + 415 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 56 | + 223 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.0 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.01 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ <0.01 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ <0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 5.4 | ▲ 7.1 | |
| Temperature | °C | – | – | 27 | | | ▲ 17.3 | ▲ 18.5 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free_avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035333

| | |
|---|---|
| 1/31 | 10512.0 |
| 2/1 | 10517.0 |
| 2/2 | 10543.4 |
| 2/3 | 10556.4 |
| 2/4 | 10632.2 |
| 2/5 | 10806.0 |
| 2/6 | 10826.4 |
| 2/7 | 10838.3 |
| 2/8 | 10845.4 |
| 2/9 | 10847.6 |
| 2/10 | 10847.6 |
| 2/11 | 10853.7 |
| 2/12 | 10858.9 |
| 2/13 | 10867.7 |
| 2/14 | 10892.5 |
| 2/15 | 10900.0 |
| 2/16 | 10900.0 |
| 2/17 | 10924.2 |
| 2/18 | 10924.2 |
| 2/19 | 10924.2 |
| 2/20 | 11373.1 |
| 2/21 | 12202.8 |
| 2/22 | 12281.1 |
| 3/23 | 12308.9 |
| 2/24 | 12308.9 |
| 2/25 | 23.0 |
| 2/26 | 56.0 |
| 2/27 | 56.0 |
| 2/28 | 60.9 |
| 2/29 | 63.8 |
| 3/1 | — |

Greg Carr

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if [illegible])

NAME Wacker [illegible]
ADDRESS PO Box 03180
Portland OR 97203
FACILITY 2200 NW Front Ave
LOCATION Portland OR 97209

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
# DISCHARGE MONITORING REPORT (DMR)

Form Approved
[illegible] No. 158-R0073

(2-16) OR-002058-7 PERMIT NUMBER

(17-19) 45 DISCHARGE NUMBER

2834 J
93450

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 01 | 01 | TO | 86 | 01 | 21 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Process Wastewater Flow - MVI | SAMPLE MEASUREMENT | 1259 | 1736 | m³/d | — | — | — | — | — | cont. | totalizing |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | — | cont. | recorder |
| MVI BOD | SAMPLE MEASUREMENT | 55.3 | 75.6 | kg/d | 34 | 42 | 55 | mg/l | 4 | 1/7 | 24 HC |
| | PERMIT REQUIREMENT | 11.2 | 22.6 | | — | 15 | 30 | | | " | " |
| TSS | SAMPLE MEASUREMENT | 89.5 | 135 | kg/d | 43 | 67 | 95 | mg/l | 4 | " | " |
| | PERMIT REQUIREMENT | 11.3 | 22.6 | | — | 15 | 30 | | | " | " |
| Cr 6+ | SAMPLE MEASUREMENT | .026 | .028 | kg/d | <.02 | <.02 | .02 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | .01 | .05 | | — | .02 | .05 | | | " | " |
| Cr total | SAMPLE MEASUREMENT | .393 | .427 | kg/d | <.3 | <.3 | .3 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | .2 | .5 | | — | .3 | 1.0 | | | " | " |
| Fluoride | SAMPLE MEASUREMENT | 7.58 | 10.0 | kg/d | 4.7 | 6.0 | 20.0 | mg/l | 0 | " | " |
| | PERMIT REQUIREMENT | 4.5 | 9.1 | | | 6.0 | 20.0 | | | " | " |
| pH | SAMPLE MEASUREMENT | — | — | — | 1.9 | — | 11.9 | pH units | 5 | continuous | |
| | PERMIT REQUIREMENT | — | — | | 6 | — | 9 | | | recorder | |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: J P Hall / Dir. Eng.
TYPED OR PRINTED

THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: J P Hall

| TELEPHONE | | DATE | | |
|---|---|---|---|---|
| 503 | 243-2020 | 84 | 02 | 14 |
| AREA CODE | NUMBER | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

We were out of compliance on pH for 21 hrs 15 minutes. We were in pH compliance 99.9% of the time. Higher than normal flows upped our loadings on all materials.

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)



SCOEPA00035335

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location if [illegible])

NAME Wallace Siltrone Corporation
ADDRESS P O Box 03180
Portland Or 97203
FACILITY 2200 Nyu Front Ave
LOCATION Portland Or 97229

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

F[illegible] Approved
[illegible] No. 158-R0073

2834 J
93450

| (2-16) PERMIT NUMBER | (17-19) DISCHARGE NUMBER |
|---|---|
| OR-003058-7 | 45 |

MONITORING PERIOD

| | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 84 | 01 | 01 | TO | 84 | 01 | 31 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM | (46-53) AVERAGE | (54-61) MAXIMUM | UNITS | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Blowdown Flow MU #3 | SAMPLE MEASUREMENT | 824 | 1107 | m3/d | — | — | — | — | | 1/1 | totaliz. |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | " | recorder |
| MU #3 Total $PO_3^{=}$ | SAMPLE MEASUREMENT | — | — | — | <.1 | .10 | .2 | mg/l | 0 | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | — | 2.0 | 5.0 | | | " | " |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| Outfall Flow | SAMPLE MEASUREMENT | 2083 | 2618 | m3/d | — | — | — | — | | 1/1 | totaliz. |
| | PERMIT REQUIREMENT | — | — | | — | — | — | | | " | recorder |
| Outfall pH | SAMPLE MEASUREMENT | — | — | — | 6.7 | 7.0 | 7.4 | pH unit | 0 | 1/7 | Grab |
| | PERMIT REQUIREMENT | — | — | | 6.0 | — | 9.0 | | | " | " |
| Outfall Temp | SAMPLE MEASUREMENT | — | — | — | 17.2 | 18.2 | 18.7 | °C | 0 | " | " |
| | PERMIT REQUIREMENT | — | — | | — | — | 27 | | | " | " |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

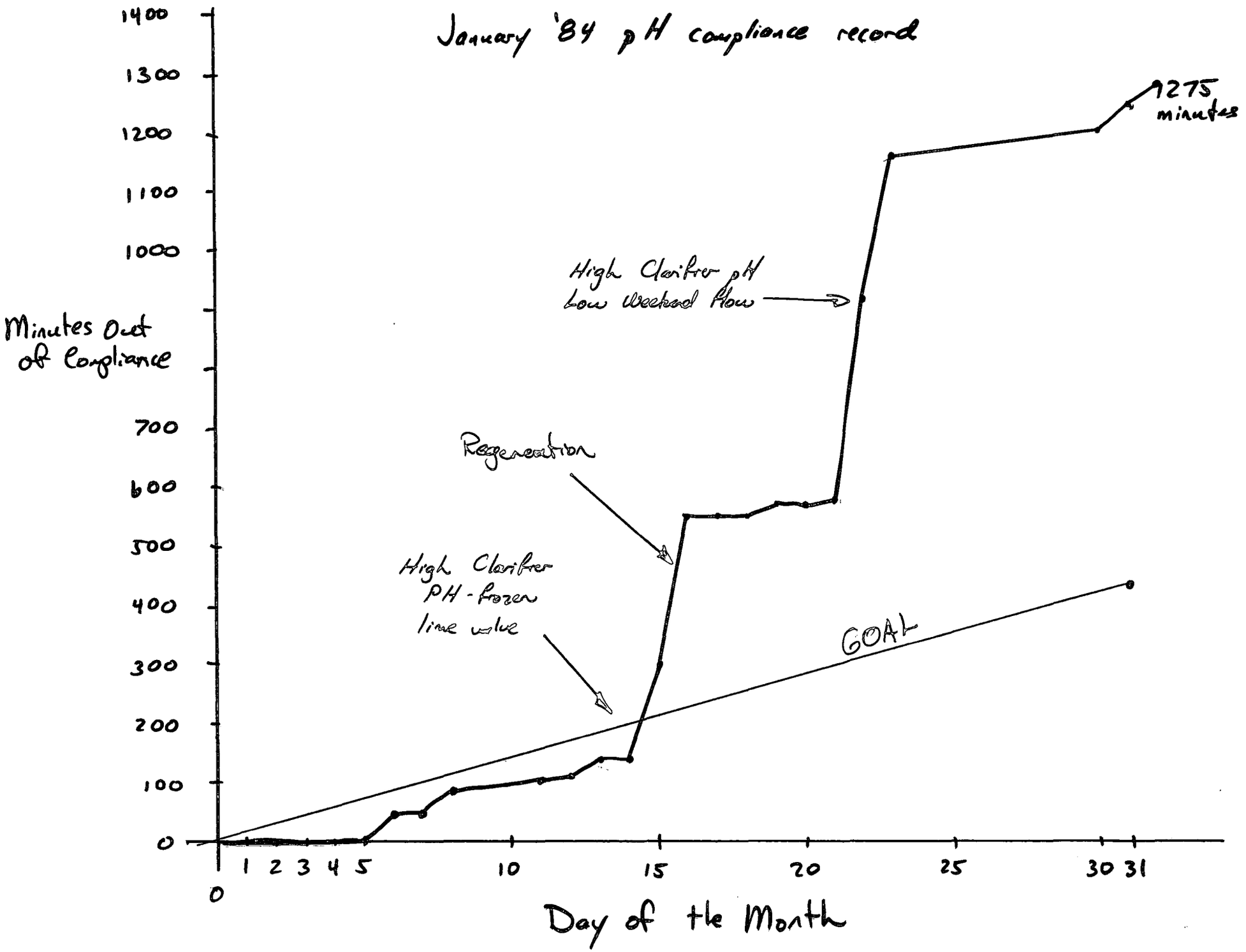
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE AREA CODE | NUMBER | DATE YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| J Pittman / Dir Eng | THIS DOCUMENT IS SIGNED WITH RECOGNITION THAT KNOWINGLY MAKING A FALSE CERTIFICATION ON THIS REPORT OR SUPPORTING DOCUMENTS OR INTENTIONALLY TAMPERING WITH ANY MONITORING DEVICE OR METHOD ARE CRIMINAL OFFENSES, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may be fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years) | J Pittman | 503 | 243 2020 | 84 | 02 | 14 |
| TYPED OR PRINTED | | | | | | | |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

EPA Form 3320-1 (Rev. 10-77) PREVIOUS EDITION TO BE USED UNTIL SUPPLY IS EXHAUSTED (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)



SCOEPA00035336




SCOEPA00035337

DWTP1B4 "^E&k2S PRINT TO M116

| DY OF YR | MO OF YR | DY OF MO | OWW TOT | COMB TOT | MV2 TOT | MV3 TOT | OWW FLOW | | COMB FLOW | MV2 FLOW | MV3 FLOW | OUTFALL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 536544 | 19837 | 1296003 | 2026289 | 292.01 | 1 | 728.20 | 45.87 | 835.35 | 1563.5503 |
| 2 | 1 | 2 | 544259 | 39076 | 1297215 | 2028496 | 279.86 | 2 | 948.33 | 28.24 | 782.36 | 1730.6964 |
| 3 | 1 | 3 | 551653 | 64131 | 1297961 | 2030563 | 424.41 | 3 | 1539.52 | 41.11 | 849.36 | 2388.8721 |
| 4 | 1 | 4 | 562866 | 104805 | 1299047 | 2032807 | 392.17 | 4 | 1565.52 | 39.48 | 864.50 | 2430.0151 |
| 5 | 1 | 5 | 573227 | 146166 | 1300090 | 2035091 | 312.98 | 5 | 1661.54 | 39.67 | 838.38 | 2499.9243 |
| 6 | 1 | 6 | 581496 | 190064 | 1301138 | 2037306 | 283.76 | 6 | 1421.31 | 40.88 | 979.18 | 2400.4921 |
| 7 | 1 | 7 | 588993 | 227615 | 1302218 | 2039893 | 193.38 | 7 | 935.96 | 34.86 | 979.56 | 1915.5185 |
| 8 | 1 | 8 | 594102 | 252343 | 1303139 | 2042481 | 227.59 | 8 | 773.88 | 39.02 | 635.12 | 1409.0083 |
| 9 | 1 | 9 | 600115 | 272789 | 1304170 | 2044159 | 235.81 | 9 | 1474.75 | 39.63 | 815.29 | 2290.0454 |
| 10 | 1 | 10 | 606345 | 311752 | 1305217 | 2046313 | 219.98 | 10 | 1510.11 | 35.54 | 781.23 | 2291.3323 |
| 11 | 1 | 11 | 612157 | 351649 | 1306156 | 2048377 | 229.64 | 11 | 1518.32 | 35.24 | 889.10 | 2407.4186 |
| 12 | 1 | 12 | 618224 | 391763 | 1307087 | 2050726 | 196.74 | 12 | 1318.93 | 31.30 | 771.01 | 2089.9319 |
| 13 | 1 | 13 | 623422 | 426609 | 1307914 | 2052763 | 165.52 | 13 | 1374.38 | 32.02 | 819.45 | 2193.8304 |
| 14 | 1 | 14 | 627795 | 462920 | 1308760 | 2054928 | 70.29 | 14 | 723.35 | 28.99 | 801.29 | 1524.6404 |
| 15 | 1 | 15 | 629652 | 482031 | 1309526 | 2057045 | 149.13 | 15 | 910.33 | 29.60 | 761.92 | 1672.2559 |
| 16 | 1 | 16 | 633592 | 506082 | 1310308 | 2059058 | 316.99 | 16 | 1475.28 | 32.74 | 781.23 | 2256.5102 |
| 17 | 1 | 17 | 641967 | 545059 | 1311173 | 2061122 | 368.74 | 17 | 1378.24 | 32.70 | 904.24 | 2282.4754 |
| 18 | 1 | 18 | 651709 | 581472 | 1312037 | 2063511 | 318.36 | 18 | 1440.80 | 36.56 | 919.76 | 2360.5602 |
| 19 | 1 | 19 | 660120 | 619538 | 1313003 | 2065941 | 272.14 | 19 | 1337.47 | 38.95 | 833.08 | 2170.5526 |
| 20 | 1 | 20 | 667310 | 654874 | 1314032 | 2068142 | 405.30 | 20 | 1016.58 | 40.01 | 1107.12 | 2123.6942 |
| 21 | 1 | 21 | 678018 | 681732 | 1315089 | 2071067 | 418.74 | 21 | 481.53 | 36.49 | 716.50 | 1198.0318 |
| 22 | 1 | 22 | 689081 | 694454 | 1316053 | 2072960 | 442.24 | 22 | 813.32 | 37.09 | 545.42 | 1358.7434 |
| 23 | 1 | 23 | 700765 | 715942 | 1317033 | 2074401 | 374.53 | 23 | 1425.74 | 41.37 | 857.68 | 2283.4217 |
| 24 | 1 | 24 | 710660 | 753610 | 1318126 | 2076667 | 417.60 | 24 | 1457.31 | 35.65 | 839.89 | 2297.1991 |
| 25 | 1 | 25 | 721693 | 792112 | 1319068 | 2078886 | 593.15 | 25 | 1455.11 | 38.72 | 821.35 | 2276.4572 |
| 26 | 1 | 26 | 737364 | 830556 | 1320091 | 2081056 | 582.59 | 26 | 1736.18 | 34.14 | 881.91 | 2618.0924 |
| 27 | 1 | 27 | 752756 | 876426 | 1320993 | 2083386 | 386.30 | 27 | 1423.92 | 32.55 | 785.39 | 2209.3111 |
| 28 | 1 | 28 | 762962 | 914046 | 1321853 | 2085461 | 294.81 | 28 | 953.67 | 31.19 | 897.80 | 1851.4762 |
| 29 | 1 | 29 | 770751 | 939242 | 1322677 | 2087833 | 338.87 | 29 | 1016.73 | 32.21 | 578.35 | 1595.0795 |
| 30 | 1 | 30 | 779704 | 966104 | 1323528 | 2089361 | 244.59 | 30 | 1614.91 | 34.37 | 871.31 | 2486.2226 |
| 31 | 1 | 31 | 786166 | 1008770 | 1324436 | 2091663 | 605.98 | 31 | 1587.40 | 34.86 | 804.69 | 2392.0893 |
| 32 | 2 | 1 | 802176 | 1050709 | 1325357 | 2093789 | | 1 | | | | |

| STREAM | COMBINED | OWW | MV2 | MV3 | OUTFALL |
|---|---|---|---|---|---|
| MAXIMUM FLOW M3/DY | 1736.18 | 605.98 | 45.87 | 1107.12 | 2618.09 |
| MINIMUM FLOW M3/DY | 481.53 | 70.29 | 28.24 | 545.42 | 1198.03 |
| AVERAGE FLOW M3/DY | 1258.67 | 324.33 | 35.84 | 824.16 | 2082.82 |
| MAXIMUM FLOW GPM | 318.51 | 111.17 | 8.42 | 203.10 | 480.30 |
| MINIMUM FLOW GPM | 88.34 | 12.89 | 5.18 | 100.06 | 219.78 |
| AVERAGE FLOW GPM | 230.91 | 59.50 | 6.58 | 151.19 | 382.10 |
| TOTAL FLOW GALLONS | 10307662. | 2656047.3 | 293509.86 | 6749307.0 | 17056969. |
| DAILY FLOW GALLONS | 332505.21 | 85678.944 | 9468.0601 | 217719.58 | 550224.79 |

| DATE | OWW | | METER VAULT THREE | | | COMBINED DISCHARGE | |
|---|---|---|---|---|---|---|---|
| | BOD | TSS | PHOSPHATE | pH | TEMP | pH | TEMP |
| 6 | 518 | 202 | .1 | 4.8 | 17.2 | 7.1 | 18.4 |
| 13 | 600 | 216 | .01 | 5.1 | 18.7 | 6.8 | 18.4 |
| 20 | 697 | 51 | .2 | 4.2 | 18.2 | 6.7 | 18.7 |
| 27 | 453 | 235 | .1 | 5 | 18.6 | 7.4 | 19.2 |
| AVERAGE | 2268 | 704 | .41 | 19.1 | 72.7 | 28 | 74.7 |

| DATE | LBS BOD IN OWW | | LBS TSS | |
|---|---|---|---|---|
| 6 | 324.08 | | 126.38 | |
| 13 | 218.96 | | 78.83 | |
| 20 | 622.84 | | 45.57 | |
| 27 | 385.82 | | 200.15 | |
| 0 | 0.00 | | 0.00 | |
| AVERAGE | 310.34171 | AVERAGE | 90.186167 | |
| AVERAGE TOTAL LBS/MO | 50275.90 | | 15605.92 | LBS/MO |

SCOEPA00035338

| DATE OF ANALYSIS | ENTER WASTEWATER ANALYSIS FOR THIS MONTH HERE BELOW PARAMETERS | * | BOD | TSS | CR 6+ | CR TOTAL | FLUORIDE |
|---|---|---|---|---|---|---|---|
| | MG/L | * | 42 | 95 | .02 | .3 | 5.8 |
| OUTFALL | MG/L | * | 24.867820 | 56.248640 | .01184182 | .17762728 | 3.4341275 |
| | KG/DAY | * | 59.695004 | 135.02441 | .02842619 | .42639288 | 8.2435958 |
| | LBS/DAY | | 131.60361 | 297.67482 | .06266838 | .94002575 | 18.173831 |
| 13 | MG/L | * | 55 | 85 | .02 | .3 | 7.3 |
| OUTFALL | MG/L | * | 34.456014 | 53.250203 | .01252946 | .18794189 | 4.5732527 |
| | KG/DAY | * | 75.590651 | 116.82192 | .02748751 | .41231264 | 10.032941 |
| | LBS/DAY | | 166.64715 | 257.54559 | .06059896 | .90898445 | 22.118622 |
| 20 | MG/L | * | 34 | 44 | .02 | .3 | 4.7 |
| OUTFALL | MG/L | * | 16.275255 | 21.062095 | .00957368 | .14360519 | 2.2498146 |
| | KG/D | * | 34.563664 | 44.729447 | .02033157 | .30497350 | 4.7779182 |
| | LBS/DAY | | 76.199053 | 98.610540 | .04482297 | .67234459 | 10.533399 |
| 27 | MG/L | * | 36 | 43 | .02 | .3 | 5.1 |
| OUTFALL | MG/L | * | 23.202330 | 27.713894 | .01289018 | .19335275 | 3.2869967 |
| | KG/DAY | * | 51.261166 | 61.228615 | .02847843 | .42717638 | 7.2619985 |
| | LBS/DAY | | 113.01037 | 134.98460 | .06278354 | .94175305 | 16.009802 |
| 5 | MG/L | * | | | | | |
| OUTFALL | MG/L | * | 0 | 0 | 0 | 0 | 0 |
| | KG/DAY | * | 0 | 0 | 0 | 0 | 0 |
| | LBS/DAY | | 0 | 0 | 0 | 0 | 0 |
| GE | MG/L COMBINED | | 167 | 267 | .08 | 1.2 | ~~22.9~~ |
| | MG/L OUTFALL | | 98.801418 | 158.27483 | .04683514 | .70252712 | 13.544192 |
| 1 | KG/DAY | | ~~221.11048~~ | ~~357.80439~~ | .10472369 | ~~1.5708554~~ | ~~30.316453~~ |
| | LBS/DAY | | 487.46017 | 788.81556 | .23087386 | 3.4631078 | 66.835653 |
| MAXIMUM | MG/L COMBINED | | 55 | 95 | .02 | .3 | 7.3 |
| | MG/L OUTFALL | | 34.456014 | 56.248640 | .01289018 | .19335275 | 4.5732527 |
| | KG/D | * | 75.590651 | 135.02441 | .02847843 | .42717638 | 10.032941 |
| MINIMUM | MG/L COMBINED | | 0 | 0 | 0 | 0 | 0 |
| | MG/L OUTFALL | | 0 | 0 | 0 | 0 | 0 |
| | KG/DAY | * | 0 | 0 | 0 | 0 | 0 |

| | | BOD MG/L | BOD KG/D | TSS MG/L | TSS KG/D | CR6+ MG/L | CR6+ KG/D | CR MG/L | CR KG/D | F- MG/L | F- KG/D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DATA SUMMARY FOR PLOTTING. | | 42 | 59.695004 | 95 | 135.02441 | .02 | .02842619 | .3 | .42639288 | 5.8 | 8.2435958 |
| | | 55 | 75.590651 | 85 | 116.82192 | .02 | .02748751 | .3 | .41231264 | 7.3 | 10.032941 |
| | COMBINED | 34 | 34.563664 | 44 | 44.729447 | .02 | .02033157 | .3 | .30497350 | 4.7 | 4.7779182 |
| | EFFLUENT | 36 | 51.261166 | 43 | 61.228615 | .02 | .02847843 | .3 | .42717638 | 5.1 | 7.2619985 |
| | PARAMETERS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | OUTFALL PARAMETERS | BOD MG/L | TSS MG/L | CR6+ MG/L | CR MG/L | F- MG/L |
|---|---|---|---|---|---|---|
| | | 24.867820 | 56.248640 | .01184182 | .17762728 | 3.4341275 |
| | | 34.456014 | 53.250203 | .01252946 | .18794189 | 4.5732527 |
| | | 16.275255 | 21.062095 | .00957368 | .14360519 | 2.2498146 |
| | | 23.202330 | 27.713894 | .01289018 | .19335275 | 3.2869967 |
| | | 0 | 0 | 0 | 0 | 0 |

SCOEPA00035339

# pH violations January 1984

| | Duration | pH | Cause | Report ? |
|---|---|---|---|---|
| 1/4 | :05 | | | |
| 1/5 | :15 | 11.0 | | |
| | :25 | 9.5 | | |
| | :05 | 9.9 | | |
| 1/8 | :17 | 10.9 | | |
| | :25 | 10.9 | | |
| 1/9 | :05 | 9.9 | | |
| 1/12 | 1:40 | } 11.0/1.5 | High Clarifier pH | 1 |
| | :10 | | Flow variations | |
| | :30 | | " | |
| 1/13 | :35 | 10.9/2.3 | | |
| 1/15 | 2:15 | 11.6/4.0 | Regeneration | 2 |
| | :30 | | | |
| 1/16 | :12 | | | |
| | :10 | | Low clarifier pH / | |
| | :05 | | High clarifier pH | |
| | :10 | | - lime valve froze | |
| | 1:10 | | | 3 |
| 1/19 | :20 | 11.0 | | |
| 1/22 | 6:50 | 11.9/1.9 | High Clarifier pH | 4 |
| | 3:00 | 9.9/2.5 | + Flow variations | 5 |
| 1/24 | :10 | | | |
| 1/27 | :10 | 3.7 | | |
| 1/29 | :10 | 10.2 | | |
| | :10 | 5.2 | | |
| | :10 | 9.7 | | |
| 1/30 | :42 | | High clarifier pH | |
| 1/31 | :40 | | | |

Total ~ 2 hrs Regeneration
14.6 hrs High Clarifier pH

Total 1275 minutes 21 hrs 15 minutes
or 2.86% of the time

in compliance 97.1% of the time

SCOEPA00035340

# W.W.T.P. EXCEPTION REPORT

NPDES Maximums

JANUARY 84

| Standards | Date/Time | | Violation | Reason for Occurance |
|---|---|---|---|---|
| Combined pH 6.0-9.0 | 1-5-84 | 08:35/08:50 | Hi/Low "OWW" Ph 11.7 / 3.2 | REGEN. OVERFLOWED CCWW ST. TNK. |
| OWW pH 5.5-10.0 | 1/12/84 | 1330 -1430 | Hi CE P.h. 9.0 → 10.7 | High clarifier P.h. due to instrumentation work on probes, heavy CCW to WAN High clarifier P.h. resulting from work on probes, WANT unable to compensate for high clarifier, CAN P.h. |
| TSS 30 ppm | | | | |
| BOD 30 ppm | | | | |
| Hexa Cromium .05 ppm | | | | |
| Total Cromium 1.0 ppm | 1-13-84 | 15:45/16:10 | Hi/Low "C.E. Ph" 10.9 / 2.3 (Flow-induced pH variation) | CLARIFIER Ph IS high & THE COMPUTER IS OVERREACTING |
| Fluoride 20 ppm | 1-15-84 | 11:50/13:30 | Hi/Low "OWW" Ph 11.6 / 2.5 | "OWNT" AUTO. LIME VALVE FROZE |
| Phosphate 5 ppm | 1-15-84 | 10:30/13:35 | Hi/Low "C.E. Ph" 11.6 / 4.0 | REGENERATION & ONLY ONE OPERT |
| | 1-16-84 | 0015-0045 | Low Ph OWNT 3.8 | 'OWNT' Auto Lime Valve frozen |
| LIST ONLY INFRACTIONS IN EXCESS OF 15 MINUTES. | 1/16/84 | 0550-650 | high CE P.h. of = 9.0 - 9.7 | High want P.h. due to frozen Autolime valve and to the use of the manual lime valve. |
| | 1-22 | 0230 - 0400 | High CE PH 11.5 | Provox have blacked out plus m/f... CAD storage. Taylor calling for 'caustic instead of acid. |
| | DODGED 1/26 1-23 | 09:55/11:35 | Hi OWW PH 11.6 | Regen. overflow [illegible] |

SCOEPA00035341

# W.W.T.P. EXCEPTION REPORT

NPDES Maximums

Jan. 84

| Standards | Date/Time | Violation | Reason for Occurance |
|---|---|---|---|
| Combined pH 6.0-9.0 | 1-23-84 09:55/11:35 | Hi "OWW" Ph 11.6 | Regen. overflowed CCWW St. Tank |
| OWW pH 5.5-10.0 | 1-26-84 1:40pm | Test on CE to check counter. (+) | |
| | 1-27-84 10:20/10:50 | Hi/Low "OWW" Ph 11.7/3.6 | Regen. overflowed CCWW St. Tank |
| TSS 30 ppm | 1-27-84 12:30/13:00 | Hi "OWW" Ph 10.8 | Hot CCWW, to "OWNT" |
| BOD 30 ppm | 1-29-84 0035-0135 | Hi OWW Ph 11.7 | Rinse of Anion Bed |
| Hexa Cromium .05 ppm | 1/30/84 unknown time due to no chart in Roll chart | High CE P.h. unknown - counters = = # of Times = 000086 = # of mins out = 10501.9 (29.6 mins out) | Due to saturated (Lime) CANT + flash mix, after C/I of computer control, all due to c/o of flow from CANT storage to Nuet' tank due to maint removal of agitator mixer in flash mix |
| Total Cromium 1.0 ppm | | | |
| Fluoride 20 ppm | | | |
| Phosphate 5 ppm | | | |

# WEEKLY WASTEWATER ANALYSIS

FACILITIES MGR. –
FACILITIES OP. SUPR. –
ENVIRONMENTAL ENG
FILE (1)

TO: DISTRIBUTION
DATE: 1-6-84
ANALYSTS: Eliam

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 1/6/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲42 | + 518 | | | |
| TSS | mg/l | – | 15 | 30 | ▲95 | +202 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲5.8 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲<0.02 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲<0.3 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲4.8 | ▲7.1 | |
| Temperature | °C | – | – | 27 | | | ▲17.2 | ▲18.4 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035343

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 1-13-84
ANALYSTS: Eliam

FACILITIES MGR. ~
FACILITIES OP. SUPR.
ENVIRONMENTAL ENGI
FILE (2)

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 1/13/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲55 | +600 | | | |
| TSS | mg/l | – | 15 | 30 | ▲85 | +216 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲7.3 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲<0.02 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲<0.3 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲<0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲5.1 | ▲6.8 | |
| Temperature | °C | – | – | 27 | | | ▲18.7 | ▲18.4 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035344

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 1-20-84
ANALYSTS: Eliam

FACILITIES MGR. ~
FACILITIES OP. SUPR
ENVIRONMENTAL ENG
FILE (3)

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 1/20 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲ 34 | + 697 | | | |
| TSS | mg/l | – | 15 | 30 | ▲ 44 | + 51 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲ 4.7 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲ <0.02 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲ <0.3 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲ 0.2 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲ 4.2 | ▲ 6.7 | |
| Temperature | °C | – | – | 27 | | | ▲ 18.2 | ▲ 18.7 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | μmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035345

# WEEKLY WASTEWATER ANALYSIS

TO: DISTRIBUTION
DATE: 1-27-84
ANALYSTS: Elam

FACILITIES MGR. ~
FACILITIES OP. SUPR
ENVIRONMENTAL ENG
FILE (4)

| SAMPLE LOCATION | – | – | – | – | Process Wastewater To River | Organic Wastewater To Sewer | Meter Vault No. 3 To River | Combined Discharge To River | |
|---|---|---|---|---|---|---|---|---|---|
| Collected By S. Pengelly | – | NPDES PARAMETER LIMITS | | | | | | | |
| Date 1/27/84 | – | | | | | | | | |
| Time | UNITS | MIN | NOM | MAX | | | | | |
| 5 day-BOD | mg/l | – | 15 | 30 | ▲36 | +453 | | | |
| TSS | mg/l | – | 15 | 30 | ▲43 | +235 | | | |
| $F^-$ | mg/l | – | 6 | 20 | ▲5.1 | | | | |
| $Cr^{6+}$ | mg/l | – | 0.02 | 0.05 | ▲<0.02 | | | | |
| $Cr^{total}$ | mg/l | – | 0.3 | 1 | ▲<.03 | | | | |
| Phosphates | mg/l | – | 2 | 5 | | | ▲0.1 | | |
| Free Avail. Chlorine | mg/l | – | 0.2 | 0.5 | | | ▲ | | |
| pH | pH units | 6 | – | 9 | | | ▲5.0 | ▲7.4 | |
| Temperature | °C | – | – | 27 | | | ▲18.6 | ▲19.2 | |
| Turbidity | NTU | – | – | – | | | | | |
| Conductivity | µmho's cm | – | – | – | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Marked items are NPDES Parameters.
▲,+ Marked items are to be tested Weekly (free avail. chlorine only during chlorination).

COMMENTS

SCOEPA00035346

WACKER
Wacker Siltronic Corporation

002

January 11, 2000 ER:PH

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the December, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Hoy at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035347

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

.NDUSTRY NAME: Wacker Siltronic Corporation

'ERMIT NUMBER: 469.001

REPORT DUE DATE: **January 15, 2000**

SAMPLING PERIOD: October - December, 1999

**For Industial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By:**

**Comments:**

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| | #1B (Fab 2) | GRAB |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|
| pH | | SU | | 5.0 - 11.5 | N/A | No pH Excursions |
| TTOs (Volatiles) | | mg/L | | 1.37 mg/L | N/A | SEE CERTIFICATION STATEMENT BELOW |

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| 12/9/99 | #1B (Fab 2) | COMPOSITE |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| Arsenic (Total) | EPA 6020 | < 0.001 | mg/L | 0.001 | 0.2 mg/L | 0.83 mg/L | |
| Mercury (Total) | EPA 1631 | < 0.0004 | mg/L | 0.0004 | 0.010 mg/L | N/A | |
| Molybdenum (Total) | EPA 6020 | 0.0746 | mg/L | 0.005 | 1.4 mg/L | N/A | |
| Selenium (Total) | EPA 6020 | 0.0043 | mg/L | 0.001 | 0.6 mg/L | N/A | |
| Zinc (Total) | EPA 6020 | 0.0325 | mg/L | 0.005 | 3.7 mg?l | N/A | |

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas G McKee Date: 1/11/00



SCOEPA00035348

www.ncalabs.com

Seattle 18939 120th Avenue NE, Suite 101, Bothell, WA 98011-9508
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | P.O. No. 210162 | Sampled: 12/9/99 |
| 7200 N.W. Front | Project Number: | n/a | Received: 12/9/99 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/24/99 08:29 |

## Total Metals per EPA 6000/7000 Series Methods
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **99-131** | | | **P912164-01** | | | | **Water** | |
| **Chromium** | 1290486 | 12/16/99 | 12/19/99 | EPA 6020 | 0.00100 | **0.00100** | mg/l | |
| **99-133** | | | **P912164-03** | | | | **Water** | |
| Arsenic | 1290566 | 12/20/99 | 12/21/99 | EPA 6020 | 0.00100 | ND | mg/l | |
| **Molybdenum** | " | " | " | EPA 6020 | 0.00500 | **0.0746** | " | |
| **Selenium** | " | " | 12/22/99 | EPA 6020 | 0.00100 | **0.00430** | " | |
| **Zinc** | 1290588 | 12/21/99 | " | EPA 6020 | 0.00500 | **0.0325** | " | |
| Mercury | 1290405 | 12/14/99 | 12/15/99 | EPA 1631 | 0.000400 | ND | " | |

North Creek Analytical - Portland

**Refer to end of report for text of notes and definitions.*

Howard Holmes, Project Manager





SCOEPA00035349

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www.ncalabs.com

Seattle 18939 120th Avenue NE Suite 101 Bothell WA 98011-9508
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Spokane East 11115 Montgomery Suite B Spokane WA 99206-4776
509 924 9200 fax 509 921 9290
Portland 9405 SW Nimbus Avenue Beaverton OR 97008-7132
503 906 9200 fax 503 906 9210
Bend 20332 Empire Avenue Suite F-1 Bend OR 97701-5711
541 383 9310 fax 541 382 7588

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | P.O. No. 210162 | Sampled: 12/9/99 |
| 7200 N.W. Front | Project Number: | n/a | Received: 12/9/99 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/24/99 08:29 |

## Total Metals per EPA 6000/7000 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **LCS** | **1290566-BS1** | | | | | | | | | |
| Arsenic | 12/21/99 | 0.100 | | 0.104 | mg/l | 80.0-120 | 104 | | | |
| Molybdenum | " | 0.100 | | 0.118 | " | 80.0-120 | 118 | | | |
| Selenium | " | 0.100 | | 0.0925 | " | 80.0-120 | 92.5 | | | |
| **Duplicate** | **1290566-DUP1** | | **P912348-01** | | | | | | | |
| Arsenic | 12/21/99 | | 0.0189 | 0.0163 | mg/l | | | 20.0 | **14.8** | |
| Molybdenum | " | | 0.0134 | 0.0103 | " | | | 20.0 | **26.2** | 1 |
| Selenium | " | | 0.00130 | ND | " | | | 20.0 | | |
| **Matrix Spike** | **1290566-MS1** | | **P912348-01** | | | | | | | |
| Arsenic | 12/21/99 | 0.100 | 0.0189 | 0.121 | mg/l | 75.0-125 | **102** | | | |
| Molybdenum | " | 0.100 | 0.0134 | 0.128 | " | 75.0-125 | **115** | | | |
| Selenium | 12/22/99 | 0.100 | 0.00130 | 0.101 | " | 75.0-125 | **99.7** | | | |
| **Matrix Spike** | **1290566-MS2** | | **P912199-01** | | | | | | | |
| Arsenic | 12/21/99 | 0.100 | 0.00220 | 0.0995 | mg/l | 75.0-125 | **97.3** | | | |
| Molybdenum | " | 0.100 | 0.00610 | 0.117 | " | 75.0-125 | **111** | | | |
| Selenium | " | 0.100 | ND | 0.0971 | " | 75.0-125 | **97.1** | | | |
| **Batch: 1290588** | **Date Prepared: 12/21/99** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **1290588-BLK1** | | | | | | | | | |
| Zinc | 12/21/99 | | | **ND** | mg/l | **0.00500** | | | | |
| **LCS** | **1290588-BS1** | | | | | | | | | |
| Zinc | 12/22/99 | 0.100 | | 0.107 | mg/l | 80.0-120 | 107 | | | |
| **Duplicate** | **1290588-DUP1** | | **P912348-01** | | | | | | | |
| Zinc | 12/21/99 | | 0.571 | 0.520 | mg/l | | | 20.0 | **9.35** | |
| **Matrix Spike** | **1290588-MS1** | | **P912348-01** | | | | | | | |
| Zinc | 12/21/99 | 0.100 | 0.571 | 0.615 | mg/l | 75.0-125 | **44.0** | | | 2 |
| **Matrix Spike** | **1290588-MS2** | | **P912181-01** | | | | | | | |
| Zinc | 12/21/99 | 0.100 | 0.0889 | 0.188 | mg/l | 75.0-125 | **99.1** | | | |

North Creek Analytical - Portland

**Refer to end of report for text of notes and definitions.*

Howard Holmes, Project Manager



*North Creek Analytical, Inc.*
*Environmental Laboratory Network*

SCOEPA00035350

www.ncalabs.com

Seattle 18939 120th Avenue NE, Suite 101, Bothell, WA 98011-9508
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Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
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503 906.9200 fax 503 906 9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541 383 9310 fax 541 382 7588

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | P.O. No. 210162 | Sampled: 12/9/99 |
| 7200 N.W. Front | Project Number: | n/a | Received: 12/9/99 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/24/99 08:29 |

## Total Metals per EPA 6000/7000 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 1290405** | **Date Prepared: 12/14/99** | | | | | **Extraction Method: EPA 1631** | | | | |
| **Blank** | **1290405-BLK1** | | | | | | | | | |
| Mercury | 12/15/99 | | | **ND** | mg/l | **0.000200** | | | | |
| **LCS** | **1290405-BS1** | | | | | | | | | |
| Mercury | 12/15/99 | 0.00500 | | 0.00491 | mg/l | 80.0-120 | 98.2 | | | |
| **Duplicate** | **1290405-DUP1** | | **P912183-02** | | | | | | | |
| Mercury | 12/15/99 | | ND | ND | mg/l | | | 20.0 | | |
| **Matrix Spike** | **1290405-MS1** | | **P912183-02** | | | | | | | |
| Mercury | 12/15/99 | 0.00500 | ND | 0.00578 | mg/l | 75.0-125 | **116** | | | |
| **Matrix Spike** | **1290405-MS2** | | **P912183-09** | | | | | | | |
| Mercury | 12/15/99 | 0.00500 | ND | 0.00501 | mg/l | 75.0-125 | **100** | | | |
| **Batch: 1290486** | **Date Prepared: 12/16/99** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **1290486-BLK1** | | | | | | | | | |
| Chromium | 12/19/99 | | | **ND** | mg/l | **0.00100** | | | | |
| **LCS** | **1290486-BS1** | | | | | | | | | |
| Chromium | 12/19/99 | 0.100 | | 0.105 | mg/l | 80.0-120 | 105 | | | |
| **Duplicate** | **1290486-DUP1** | | **P912225-02** | | | | | | | |
| Chromium | 12/19/99 | | ND | ND | mg/l | | | 20.0 | | |
| **Matrix Spike** | **1290486-MS1** | | **P912225-02** | | | | | | | |
| Chromium | 12/19/99 | 0.100 | ND | 0.0994 | mg/l | 75.0-125 | **99.4** | | | |
| **Matrix Spike Dup** | **1290486-MSD1** | | **P912225-02** | | | | | | | |
| Chromium | 12/19/99 | 0.100 | ND | 0.103 | mg/l | 75.0-125 | **103** | 20.0 | **3.56** | |
| **Batch: 1290566** | **Date Prepared: 12/20/99** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **1290566-BLK1** | | | | | | | | | |
| Arsenic | 12/21/99 | | | **ND** | mg/l | **0.00100** | | | | |
| Molybdenum | " | | | **ND** | " | **0.00500** | | | | |
| Selenium | " | | | **ND** | " | **0.00100** | | | | |

North Creek Analytical - Portland

**Refer to end of report for text of notes and definitions.*

Howard Holmes, Project Manager





SCOEPA00035351

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200

0.7°C

COPY

# CHAIN OF CUSTODY REPORT

**Work Order #** 9912164

REPORT TO: Wacker Siltronic
ATTENTION: Tom Rothschild
ADDRESS: 7200 N.W. Front Ave
Portland, Oregon
PHONE: 219-7274 FAX: 417-4144
PROJECT NAME:
PROJECT NUMBER:
SAMPLED BY: Dianne Mullan

INVOICE TO: Wacker Siltronic
ATTENTION: Accts Payable
ADDRESS: same
P.O. NUMBER: 210162 NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 Standard | X | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: 5 Standard | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Cr (T) | As, Hg, Mo, Se, Zn (Total) | 8260 | 8270 | 1,2 Diphenylhydrazine | IPA | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 99-131 | 12-09-99 0730 | | X | | | | | | W | 1 | |
| 2. | 99-132 | 12-09-99 0730 | | | | X | X | X | | W | 4 | |
| 3. | 99-133 | 12-09-99 0730 | | | X | | | | | W | 1 | |
| 4. | 99-134 | 12-09-99 0730 | | | | X | | | X | W | 4 | |
| 5. | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | |

RELINQUISHED BY (Signature): Dianne Mullan DATE: 12-09-99
PRINT NAME: Dianne Mullan FIRM: Wacker TIME: 0850
RELINQUISHED BY (Signature): DATE: 12-9-99
PRINT NAME: Larry Spangler FIRM: NCA TIME:

RECEIVED BY (Signature): DATE: 12-9-99
PRINT NAME: Larry Spangler FIRM: NCA TIME: 0850
RECEIVED BY (Signature): DATE: 12/9/99
PRINT NAME: Bob Fakkele FIRM: NCA TIME: 10:05

ADDITIONAL REMARKS: 1) Cr(T)-Please use detection limit of 0.001 ppm.
4) IPA - Please use detection limit of 1.0 ppm.

PAGE 1 OF 1

SCOEPA00035352

WACKER
Wacker Siltronic Corporation

December 10, 1999 ER154:PH

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the November, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Hoy at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035353

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469.001

REPORT DUE DATE: **December 15, 1999**

SAMPLING PERIOD: November, 1999

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By:**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| #1B (Fab 2) | Foxboro | 761 | 5.0 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| | No pH Excursions | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.0 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 4.5 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas G McCann Date: 12/10/99

S:\CUSTOMER\IU-W\WACKER\INSP-MON\99CPHSMR.DOC

SCOEPA00035354

All self-monitoring reports (SMR) must include the following to be considered complete. For more detailed information regarding these items, please refer to the colored reference sheet. If you have any questions, please contact your permit manager for assistance.

Self Monitoring Report Check List:

- ☐ Chain of Custody form
- ☐ Analytical Results with Method Detection Limits (MDL)
- ☐ QA/QC Results, if applicable
- ☐ Signed Signatory Certification Statement (Printed on bottom of SMR)
- ☐ Completed Self Monitoring Report form

Whenever appropriate:

- ☐ Hand Composite Sample form
- ☐ Copies of pH charts showing the violation
- ☐ Calculations of monthly average
- ☐ Any other required reports

To assure prompt delivery, mail all monitoring results to:

Industrial Source Control Division
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

Attn: <Your permit manager's name here>

WACKER
Wacker Siltronic Corporation

November 8, 1999 ER148:PH

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the October, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Hoy at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035356

ER148: PH

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469.001

REPORT DUE DATE: **November 15, 1999**

SAMPLING PERIOD: October, 1999

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| #1B (Fab 2) | Foxboro | 761 | 5.0 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| | NO PH Excursions | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.0 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 4.5 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

For Wacker Siltronic Corporation:

Signature: _____ Date: 11/8/99

S:\CUSTOMER\IU-W\WACKER\INSP-MON\99CPHSMR.DOC

SCOEPA00035357

October 7, 1999 ER144:PH

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the September, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Hoy at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035358

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469.001

REPORT DUE DATE: **October 15, 1999**

SAMPLING PERIOD: July - September, 1999

**For Industial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments**

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| September 9, 1999 | #1B (Fab 2) | GRAB |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| pH | No Excursions | | SU | | 5.0 - 11.5 | N/A | |
| TTOs (Volatiles) | Certification | | mg/L | | 1.37 mg/L | N/A | SEE CERTIFICATION STATEMENT BELOW |

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| September 9, 1999 | #1B (Fab 2) | COMPOSITE |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| Arsenic (Total) | EPA 200.8 | < 0.005 | mg/L | 0.005 | 0.2 mg/L | 0.83 mg/L | |
| Mercury (Total) | EPA 200.8 | < 0.0004 | mg/L | 0.0004 | 0.010 mg/L | N/A | |
| Molybdenum (Total) | EPA 200.8 | < 0.025 | mg/L | 0.025 | 1.4 mg/L | N/A | |
| Selenium (Total) | EPA 200.8 | < 0.005 | mg/L | 0.005 | 0.6 mg/L | N/A | |
| Zinc (Total) | EPA 200.8 | 0.036 | mg/L | 0.025 | 3.7 mg?l | N/A | |

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas C. McCue Date: 10/7/99



SCOEPA00035359

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | Bioassay-99 | Sampled: 9/9/99 to 9/13/99 |
| 7200 N.W. Front | Project Number: | PO #210162 | Received: 9/8/99 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 9/24/99 10:13 |

**Total Metals per EPA 200 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 99-92 CE, Comp | | | P909143-02 | | | | Water | |
| Chromium | 0990399 | 9/14/99 | 9/14/99 | EPA 200.8 | 0.00100 | 0.00110 | mg/l | |
| 99-93 OWW, Comp | | | P909143-03 | | | | Water | |
| Arsenic | 0990399 | 9/14/99 | 9/14/99 | EPA 200.8 | 0.00500 | ND | mg/l | |
| Molybdenum | " | " | " | EPA 200.8 | 0.0250 | ND | " | |
| Selenium | " | " | " | EPA 200.8 | 0.00500 | ND | " | |
| Zinc | " | " | 9/16/99 | EPA 200.8 | 0.0250 | 0.0360 | " | |
| Mercury | 0990537 | 9/22/99 | 9/22/99 | EPA 245.1 | 0.000400 | ND | " | 1 |



SCOEPA00035360

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | Bioassay-99 | Sampled: 9/9/99 to 9/13/99 |
| 7200 N.W. Front | Project Number: | PO #210162 | Received: 9/8/99 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 9/24/99 10:13 |

## Total Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0990399** | **Date Prepared: 9/14/99** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **0990399-BLK1** | | | | | | | | | |
| Arsenic | 9/14/99 | | | ND | mg/l | 0.00100 | | | | |
| Chromium | " | | | ND | " | 0.00100 | | | | |
| Molybdenum | " | | | ND | " | 0.00500 | | | | |
| Selenium | " | | | ND | " | 0.00100 | | | | |
| Zinc | 9/16/99 | | | ND | " | 0.00500 | | | | |
| **LCS** | **0990399-BS1** | | | | | | | | | |
| Arsenic | 9/14/99 | 0.100 | | 0.0915 | mg/l | 85.0-115 | 91.5 | | | |
| Chromium | 9/16/99 | 0.100 | | 0.0932 | " | 85.0-115 | 93.2 | | | |
| Molybdenum | " | 0.100 | | 0.0968 | " | 85.0-115 | 96.8 | | | |
| Selenium | 9/14/99 | 0.100 | | 0.0884 | " | 85.0-115 | 88.4 | | | |
| Zinc | 9/16/99 | 0.100 | | 0.0913 | " | 85.0-115 | 91.3 | | | |
| **Duplicate** | **0990399-DUP1** | | **P909157-02** | | | | | | | |
| Arsenic | 9/14/99 | | 0.00360 | 0.00330 | mg/l | | | 20.0 | 8.70 | |
| Chromium | " | | 0.00230 | 0.00210 | " | | | 20.0 | 9.09 | |
| Molybdenum | " | | ND | ND | " | | | 20.0 | | |
| Selenium | " | | ND | ND | " | | | 20.0 | | |
| Zinc | 9/16/99 | | 0.0433 | 0.0442 | " | | | 20.0 | 2.06 | |
| **Matrix Spike** | **0990399-MS1** | | **P909157-02** | | | | | | | |
| Arsenic | 9/14/99 | 0.100 | 0.00360 | 0.0931 | mg/l | 70.0-130 | 89.5 | | | |
| Chromium | " | 0.100 | 0.00230 | 0.0984 | " | 70.0-130 | 96.1 | | | |
| Molybdenum | " | 0.100 | ND | 0.0965 | " | 70.0-130 | 96.5 | | | |
| Selenium | " | 0.100 | ND | 0.0840 | " | 70.0-130 | 84.0 | | | |
| Zinc | 9/16/99 | 0.100 | 0.0433 | 0.122 | " | 70.0-130 | 78.7 | | | |
| **Matrix Spike Dup** | **0990399-MSD1** | | **P909157-02** | | | | | | | |
| Arsenic | 9/14/99 | 0.100 | 0.00360 | 0.0886 | mg/l | 70.0-130 | 85.0 | 20.0 | 5.16 | |
| Chromium | " | 0.100 | 0.00230 | 0.0918 | " | 70.0-130 | 89.5 | 20.0 | 7.11 | |
| Molybdenum | " | 0.100 | ND | 0.0905 | " | 70.0-130 | 90.5 | 20.0 | 6.42 | |
| Selenium | " | 0.100 | ND | 0.0798 | " | 70.0-130 | 79.8 | 20.0 | 5.13 | |
| Zinc | 9/16/99 | 0.100 | 0.0433 | 0.119 | " | 70.0-130 | 75.7 | 20.0 | 3.89 | |
| **Batch: 0990537** | **Date Prepared: 9/22/99** | | | | | **Extraction Method: EPA 7470** | | | | |
| **Blank** | **0990537-BLK1** | | | | | | | | | |
| Mercury | 9/22/99 | | | ND | mg/l | 0.000200 | | | | |

North Creek Analytical - Portland

*Refer to end of report for text of notes and definitions.*

Sara McClurg, Project Manager



SCOEPA00035361

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (425) 420-9200 FAX 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210

# CHAIN OF CUSTODY REPORT

**Work Order #**

| | |
|---|---|
| REPORT TO: Wacker Siltronic | INVOICE TO: Wacker Siltronic |
| ATTENTION: Tom Rothrock | ATTENTION: Accts Payable |
| ADDRESS: 7200 NW Front Ave | ADDRESS: |
| Portland, OR | |
| PHONE: 219 7591 FAX: 417-4144 | P.O. NUMBER: 210162 NCA QUOTE #: |
| PROJECT NAME: | |
| PROJECT NUMBER: | |
| SAMPLED BY: Diane Mullen | |

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: [10] Standard | 7 | 5 | 4 | 3 | 2 | 1 | Same Day

Fuels & Hydrocarbon Analyses: [5] Standard | 3-4 | 2 | 1 | Same Day

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Cr (T) | TCLP: As, Ba, Cd, Cr, Pb, Se, Ag, Hg; Total: As, Hg, Se, Zn | Biogassay | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 99.92 | 9/9/99 0730 | | X | | | W | 1 | HNO3 |
| 2. | 99.93 | 9/9/99 0730 | | | X | | W | 1 | HNO3 |
| 3. | 99.94 | 9/9/99 1050 | | X | | | W | 1 | |
| 4 | 99.95 | 9/10/99 0750 | | | | X | S | 1 | |
| 5. | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8. | | | | | | | | | |
| 9. | | | | | | | | | |
| 10 | | | | | | | | | |

| | | | |
|---|---|---|---|
| RELINQUISHED BY (Signature) Diane Mullen | DATE: 9-10-99 | RECEIVED BY (Signature) | DATE: |
| PRINT NAME: Diane Mullen | FIRM: Wacker TIME: 1600 | PRINT NAME: Amy Gaylor | FIRM: NCA TIME: 1600 |
| RELINQUISHED BY (Signature) | DATE: | RECEIVED BY (Signature) | DATE: |
| PRINT NAME: | FIRM: TIME: | PRINT NAME: | FIRM: TIME: |

ADDITIONAL REMARKS: 1) Please use detect limit of 0.001 ppm

PAGE 1 OF 1

SCOEPA00035362

WACKER
Wacker Siltronic Corporation

September 8, 1999 ER141:PH

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the August, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Hoy at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035363

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469.001

REPORT DUE DATE: **September 15, 1999**

SAMPLING PERIOD: August, 1999

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By:**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| #1B (Fab 2) | Foxboro | 761 | 5.0 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.0 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 4.5 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: _____ Date: 9/9/99

S:\CUSTOMER\IU-W\WACKER\INSP-MON\99CPHSMR.DOC

WACKER
Wacker Siltronic Corporation

August 10, 1999 ER139:PH

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the July, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Hoy at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035365

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469.001

REPORT DUE DATE: **August 15, 1999**

SAMPLING PERIOD: July, 1999

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By:**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| #1B (Fab 2) | Foxboro | 761 | 5.0 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| | NO PH EXCURSIONS | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.0 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 4.5 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas C. McCue Date: 8/10/99

S:\CUSTOMER\IU-W\WACKER\INSP-MON\99CPHSMR.DOC

WACKER
Wacker Siltronic Corporation

July 8, 1999 ER136:PH

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the July, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Hoy at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035367

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469.001

REPORT DUE DATE: **July 15, 1999**

SAMPLING PERIOD: April - June, 1999

**For Industial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| June 24, 1999 | #1B (Fab 2) | GRAB |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|
| pH | Foxboro | No pH Excursions SU | | 5.0 - 11.5 | N/A | |
| TTOs (Volatiles) | 8260B | <0.05 mg/L | | 1.37 mg/L | N/A | SEE CERTIFICATION STATEMENT BELOW |

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| June 24, 1999 | #1B (Fab 2) | COMPOSITE |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| Arsenic (Total) | 200 Series | <0.001 | mg/L | 0.00100 | 0.2 mg/L | 0.83 mg/L | |
| Mercury (Total) | 200 Series | <0.0002 | mg/L | 0.000200 | 0.010 mg/L | N/A | |
| Molybdenum (Total) | 200 Series | 0.027 | mg/L | 0.00500 | 1.4 mg/L | N/A | |
| Selenium (Total) | 200 Series | <0.001 | mg/L | 0.00100 | 0.6 mg/L | N/A | |
| Zinc (Total) | 200 Series | 0.032 | mg/L | 0.00500 | 3.7 mg?l | N/A | |

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

For Wacker Siltronic Corporation:

Signature: Thomas G McClure Date: 7/9/99



SCOEPA00035368

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | NA (P.O. No. 210162) | Sampled: 6/24/99 |
| 7200 N.W. Front | Project Number: | N/A | Received: 6/24/99 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 7/6/99 11:51 |

## Volatile Organic Compounds per EPA Method 8260B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 99-62 | | | P906533-03 | | | | Water | |
| **Acetone** | 0690812 | 6/27/99 | 6/27/99 | | 250 | **894** | ug/l | |
| Benzene | " | " | " | | 10.0 | ND | " | |
| Bromobenzene | " | " | " | | 10.0 | ND | " | |
| Bromochloromethane | " | " | " | | 10.0 | ND | " | |
| Bromodichloromethane | " | " | " | | 10.0 | ND | " | |
| Bromoform | " | " | " | | 10.0 | ND | " | |
| Bromomethane | " | " | " | | 100 | ND | " | |
| 2-Butanone | " | " | " | | 250 | ND | " | |
| n-Butylbenzene | " | " | " | | 10.0 | ND | " | |
| sec-Butylbenzene | " | " | " | | 10.0 | ND | " | |
| tert-Butylbenzene | " | " | " | | 10.0 | ND | " | |
| Carbon disulfide | " | " | " | | 100 | ND | " | |
| Carbon tetrachloride | " | " | " | | 20.0 | ND | " | |
| Chlorobenzene | " | " | " | | 10.0 | ND | " | |
| Chloroethane | " | " | " | | 20.0 | ND | " | |
| **Chloroform** | " | " | " | | 10.0 | **12.0** | " | |
| Chloromethane | " | " | " | | 50.0 | ND | " | |
| 2-Chlorotoluene | " | " | " | | 10.0 | ND | " | |
| 4-Chlorotoluene | " | " | " | | 10.0 | ND | " | |
| 1,2-Dibromo-3-chloropropane | " | " | " | | 10.0 | ND | " | |
| Dibromochloromethane | " | " | " | | 10.0 | ND | " | |
| 1,2-Dibromoethane | " | " | " | | 10.0 | ND | " | |
| Dibromomethane | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 50.0 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 10.0 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 10.0 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 10.0 | ND | " | |
| 1,3-Dichloropropane | " | " | " | | 10.0 | ND | " | |
| 2,2-Dichloropropane | " | " | " | | 10.0 | ND | " | |
| 1,1-Dichloropropene | " | " | " | | 10.0 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 10.0 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 10.0 | ND | " | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Crystal Burkholder, Project Manager



SCOEPA00035369

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | NA (P.O. No. 210162) | Sampled: 6/24/99 |
| 7200 N.W. Front | Project Number: | N/A | Received: 6/24/99 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 7/6/99 11:51 |

## Volatile Organic Compounds per EPA Method 8260B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **99-62 (continued)** | | | **P906533-03** | | | | **Water** | |
| Ethylbenzene | 0690812 | 6/27/99 | 6/27/99 | | 10.0 | ND | ug/l | |
| Hexachlorobutadiene | " | " | " | | 20.0 | ND | " | |
| 2-Hexanone | " | " | " | | 100 | ND | " | |
| Isopropylbenzene | " | " | " | | 10.0 | ND | " | |
| p-Isopropyltoluene | " | " | " | | 10.0 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 50.0 | ND | " | |
| Methylene chloride | " | " | " | | 50.0 | ND | " | |
| Naphthalene | " | " | " | | 10.0 | ND | " | |
| n-Propylbenzene | " | " | " | | 10.0 | ND | " | |
| Styrene | " | " | " | | 10.0 | ND | " | |
| 1,1,1,2-Tetrachloroethane | " | " | " | | 10.0 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 10.0 | ND | " | |
| Tetrachloroethene | " | " | " | | 10.0 | ND | " | |
| Toluene | " | " | " | | 10.0 | ND | " | |
| 1,2,3-Trichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,2,4-Trichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,1,1-Trichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 10.0 | ND | " | |
| Trichloroethene | " | " | " | | 10.0 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 10.0 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 10.0 | ND | " | |
| 1,2,4-Trimethylbenzene | " | " | " | | 10.0 | ND | " | |
| 1,3,5-Trimethylbenzene | " | " | " | | 10.0 | ND | " | |
| Vinyl chloride | " | " | " | | 10.0 | ND | " | |
| o-Xylene | " | " | " | | 10.0 | ND | " | |
| m,p-Xylene | " | " | " | | 20.0 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *75.0-135* | | *114* | *%* | |
| *Surrogate: 1,2-DCA-d4* | " | " | " | *70.0-135* | | *124* | " | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *80.0-125* | | *114* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *80.0-120* | | *94.5* | " | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Crystal Burkholder, Project Manager



SCOEPA00035370

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (425) 420-9200 FAX 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210

# CHAIN OF CUSTODY REPORT

**Work Order #**

REPORT TO: Wacker Siltronic
ATTENTION: Tom Rothschild
ADDRESS: 7200 N.W. Front Ave
Portland, OR
PHONE: 219-7374 FAX: 417-4144
PROJECT NAME:
PROJECT NUMBER:
SAMPLED BY: Dianne Mullan

INVOICE TO: Wacker Siltronic
ATTENTION: Accts Payable
ADDRESS: Same
P.O. NUMBER: 210162 NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 (Standard) | 7 | 5 | X | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: 5 (Standard) | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

Analysis Request:

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Cr (T) | Total As, Hg, Mo, Se, Zn | 8260 | BOD | | | | | | | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 99.60 | 6/24/99 0720 | | X | | | | | | | | | | W | 1 | *1 |
| 2. | 99.61 | 6/24/99 0720 | | | X | | | | | | | | | W | 1 ~~3~~ 2m | |
| 3. | 99.62 | 6/24/99 0720 | | | | X | | | | | | | | W | 3 | |
| 4. | 99.63 | 6/24/99 0800 | | | | | X | | | | | | | W | 1 | *2 |
| 5. | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | |

RELINQUISHED BY (Signature): Dianne Mullan DATE: 6.24.99
PRINT NAME: Dianne Mullan FIRM: Wacker TIME: 0840
RELINQUISHED BY (Signature): Paul Conroy DATE: 6-24-99
PRINT NAME: PAUL CONROY FIRM: WACKR TIME: 10:00A

RECEIVED BY (Signature): Bob Fahsholz DATE: 6/24/9
PRINT NAME: Bob Fahsholz FIRM: NCA TIME: 10:0
RECEIVED BY (Signature): DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS: *1) Please use detect limit of 0.01 ppm - *2) Sample #4 Please make 2 dilutions of 0.1 ppm & 0.01 ppm then use these for BODs

PAGE OF

SCOEPA00035371

WACKER
Wacker Siltronic Corporation

June 9, 1999 ER126:PH

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the June, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Hoy at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035372

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469.001

REPORT DUE DATE: **June 15, 1999**

SAMPLING PERIOD: May, 1999

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| #1B (Fab 2) | Foxboro | 761 | 5.0 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| | NO pH EXCURSIONS | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.0 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 4.5 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas C McCue Date: 6/9/99

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WACKER
Wacker Siltronic Corporation

May 10, 1999 ER118:PH

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the April, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Hoy at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035374

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469.001

REPORT DUE DATE: May 15, 1999

SAMPLING PERIOD: April, 1999

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| #1B (Fab 2) | Fab 2 Pipe | Foxboro 761 | 5.0 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| | NO pH Excursions | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.0 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 4.5 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

For Wacker Siltronic Corporation:

Signature: Thomas C. McCue Date: 5/11/99

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WACKER
Wacker Siltronic Corporation

April 7, 1999 ER116:PB

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the March, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Beissmann at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035376

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469.001

REPORT DUE DATE: **April 15, 1999**

SAMPLING PERIOD: January - March, 1999

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| March 1999 | #1B (Fab 2) | GRAB |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| pH No pH Excursions | | SU | | | 5.0 - 11.5 | N/A | Continuous Monitoring |
| TTOs (Volatiles) | | mg/L | | | 1.37 mg/L | N/A | SEE CERTIFICATION STATEMENT BELOW |

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| March 11, 1999 | #1B (Fab 2) | COMPOSITE |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| Arsenic (Total) | EPA 200.8 | < 0.005 | mg/L | 0.005 | 0.2 mg/L | 0.83 mg/L | |
| Mercury (Total) | EPA 245.1 | 0.0014 | mg/L | 0.001 | 0.010 mg/L | N/A | |
| Molybdenum (Total) | EPA 200.8 | < 0.025 | mg/L | 0.025 | 1.4 mg/L | N/A | |
| Selenium (Total) | EPA 200.8 | < 0.005 | mg/L | 0.005 | 0.6 mg/L | N/A | |
| Zinc (Total) | EPA 200.8 | 0.028 | mg/L | 0.025 | 3.7 mg?l | N/A | |

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORAITON

Signature: Thomas G McCune Date: 4/7/99



SCOEPA00035377

www.ncalabs.com

Seattle 18939 120th Avenue NE, Suite 101, Bothell, WA 98011-9508
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20354 Empire Avenue, Suite E-9, Bend, OR 97708-1883
541.383.9310 fax 541.382.7588

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 3/11/99 |
| 7200 N.W. Front | Project Number: | PO# 210162 | Received: 3/11/99 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 3/29/99 13:49 |

## Total Metals per EPA 200 Series Methods
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| NPDES permit | | | | | | | | |
| 99-23 CE, Composite | | | P903249-01 | | | | Water | |
| **Chromium** | 0390468 | 3/17/99 | 3/19/99 | EPA 200.8 | 0.00100 | **0.00230** | mg/l | |
| 99-24 OWW, Composite | | | P903249-02 | | | | Water | |
| Arsenic | 0390468 | 3/17/99 | 3/19/99 | EPA 200.8 | 0.00500 | ND | mg/l | 1 |
| Molybdenum | " | " | " | EPA 200.8 | 0.0250 | ND | " | |
| Selenium | " | " | " | EPA 200.8 | 0.00500 | ND | " | 1 |
| **Zinc** | " | " | " | EPA 200.8 | 0.0250 | **0.0280** | " | 1 |
| **Mercury** | 0390341 | 3/12/99 | 3/12/99 | EPA 245.1 | 0.00100 | **0.00140** | " | |

North Creek Analytical - Portland

**Refer to end of report for text of notes and definitions.*

Crystal Burkholder, Project Manager

***North Creek Analytical, Inc.***
***Environmental Laboratory Network***



SCOEPA00035378

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Seattle 18939 120th Avenue NE, Suite 101, Bothell, WA 98011-9508
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
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Bend 20354 Empire Avenue, Suite E-9, Bend, OR 97708-1883
541.383.9310 fax 541.382.7588

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 3/11/99 |
| 7200 N.W. Front | Project Number: | PO# 210162 | Received: 3/11/99 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 3/29/99 13:49 |

## Total Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0390341** | **Date Prepared: 3/12/99** | | | | | **Extraction Method: EPA 7470** | | | | |
| **Blank** | **0390341-BLK1** | | | | | | | | | |
| Mercury | 3/12/99 | | | **ND** | mg/l | **0.00100** | | | | |
| **LCS** | **0390341-BS1** | | | | | | | | | |
| Mercury | 3/12/99 | 0.00500 | | 0.00446 | mg/l | 85.0-115 | 89.2 | | | |
| **Duplicate** | **0390341-DUP1** | | **P903159-01** | | | | | | | |
| Mercury | 3/12/99 | | ND | ND | mg/l | | | 20.0 | | |
| **Matrix Spike** | **0390341-MS1** | | **P903159-01** | | | | | | | |
| Mercury | 3/12/99 | 0.00500 | ND | 0.00468 | mg/l | 75.0-125 | **93.6** | | | |
| **Batch: 0390468** | **Date Prepared: 3/17/99** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **0390468-BLK1** | | | | | | | | | |
| Arsenic | 3/19/99 | | | **ND** | mg/l | **0.00100** | | | | |
| Chromium | " | | | **ND** | " | **0.00100** | | | | |
| Molybdenum | " | | | **ND** | " | **0.00500** | | | | |
| Selenium | " | | | **ND** | " | **0.00100** | | | | |
| Zinc | " | | | **ND** | " | **0.00500** | | | | |
| **LCS** | **0390468-BS1** | | | | | | | | | |
| Arsenic | 3/19/99 | 0.100 | | 0.104 | mg/l | 85.0-115 | 104 | | | |
| Chromium | " | 0.100 | | 0.101 | " | 85.0-115 | 101 | | | |
| Molybdenum | " | 0.100 | | 0.104 | " | 85.0-115 | 104 | | | |
| Selenium | " | 0.100 | | 0.106 | " | 85.0-115 | 106 | | | |
| Zinc | " | 0.100 | | 0.108 | " | 85.0-115 | 108 | | | |
| **Duplicate** | **0390468-DUP1** | | **P903151-01** | | | | | | | |
| Arsenic | 3/19/99 | | 0.00530 | 0.00530 | mg/l | | | 20.0 | **0** | |
| Chromium | " | | 0.00600 | 0.00610 | " | | | 20.0 | **1.65** | |
| Molybdenum | " | | ND | ND | " | | | 20.0 | | |
| Selenium | " | | ND | ND | " | | | 20.0 | | |
| Zinc | " | | 0.0199 | 0.0219 | " | | | 20.0 | **9.57** | |
| **Matrix Spike** | **0390468-MS1** | | **P903151-01** | | | | | | | |
| Arsenic | 3/19/99 | 0.100 | 0.00530 | 0.119 | mg/l | 70.0-130 | **114** | | | |
| Chromium | " | 0.100 | 0.00600 | 0.108 | " | 70.0-130 | **102** | | | |
| Molybdenum | " | 0.100 | ND | 0.102 | " | 70.0-130 | **102** | | | |

North Creek Analytical - Portland

**Refer to end of report for text of notes and definitions.*

Crystal Burkholder, Project Manager



SCOEPA00035379

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Bend 20354 Empire Avenue, Suite E-9, Bend, OR 97708-1883
541.383.9310 fax 541.382.7588

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 3/11/99 |
| 7200 N.W. Front | Project Number: | PO# 210162 | Received: 3/11/99 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 3/29/99 13:49 |

## Total Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Matrix Spike (continued)** | **0390468-MS1** | | **P903151-01** | | | | | | | |
| Selenium | 3/19/99 | 0.100 | ND | 0.106 | mg/l | 70.0-130 | **106** | | | |
| Zinc | " | 0.100 | 0.0199 | 0.146 | " | 70.0-130 | **126** | | | |
| **Matrix Spike** | **0390468-MS2** | | **P903264-01** | | | | | | | |
| Arsenic | 3/19/99 | 0.100 | ND | 0.107 | mg/l | 70.0-130 | **107** | | | |
| Chromium | " | 0.100 | 0.00150 | 0.107 | " | 70.0-130 | **105** | | | |
| Molybdenum | " | 0.100 | ND | 0.106 | " | 70.0-130 | **106** | | | |
| Selenium | " | 0.100 | ND | 0.107 | " | 70.0-130 | **107** | | | |
| Zinc | " | 0.100 | ND | 0.119 | " | 70.0-130 | **119** | | | |

Digi / U.D

**NORTH CREEK ANALYTICAL**
*Environmental Laboratory Services*

COPY

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (425) 420-9200 FAX 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210

# CHAIN OF CUSTODY REPORT

**Work Order #** P903249

| | |
|---|---|
| REPORT TO: Wacker Siltronic | INVOICE TO: Wacker Siltronic |
| ATTENTION: Tom Rothschild | ATTENTION: Accts. Payable |
| ADDRESS: 7200 N.W. Front Ave Portland, OR | ADDRESS: |
| PHONE: 219-7374 FAX: 417-4144 | P.O. NUMBER: 210162 NCA QUOTE #: |
| PROJECT NAME: | |
| PROJECT NUMBER: | |
| SAMPLED BY: Dianne Mullan | |

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: [X] 10 Standard | 7 | 5 | 4 | 3 | 2 | 1 | Same Day

Fuels & Hydrocarbon Analyses: [5] Standard | 3-4 | 2 | 1 | Same Day

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Analysis Request: Cr (T) | Ag, Hg, Mo, Se, Zn | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| 1. | 99-23 | 3-11-99 0745 | | X | | W | 1 | $HNO_3$ |
| 2. | 99-24 (OWW) | 3-11-99 0745 | | | X | W | 1 | $HNO_3$ |
| 3. | | | | | | | | |
| 4. | | | | | | | | |
| 5. | | | | | | | | |
| 6. | | | | | | | | |
| 7. | | | | | | | | |
| 8. | | | | | | | | |
| 9. | | | | | | | | |
| 10. | | | | | | | | |

| | | | |
|---|---|---|---|
| RELINQUISHED BY (Signature): Dianne Mullan | DATE: 3/11/99 | RECEIVED BY (Signature): | DATE: 3-11- |
| PRINT NAME: Dianne Mullan FIRM: Wacker | TIME: 1510 | PRINT NAME: Larry Spangler FIRM: NCA | TIME: 1510 |
| RELINQUISHED BY (Signature): | DATE: | RECEIVED BY (Signature): | DATE: |
| PRINT NAME: FIRM: | TIME: | PRINT NAME: FIRM: | TIME: |

ADDITIONAL REMARKS: #1 Please use detect limit of 0.001 ppm

PAGE 1 OF 1

SCOEPA00035381

WACKER
Wacker Siltronic Corporation

March 5, 1999 ER110:PB

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the February, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Beissmann at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469.001

REPORT DUE DATE: **March 15, 1999**

SAMPLING PERIOD: February, 1999

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| #1B (Fab 2) | Foxboro | 761 | 5.0 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| No pH Excursions | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.0 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 4.5 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas C. McCune Date: 3/8/99

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WACKER
Wacker Siltronic Corporation

February 10, 1999 ER108:PB

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the January, 1999 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Beissmann at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469.001

REPORT DUE DATE: **February 15, 1999**

SAMPLING PERIOD: January, 1999

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| #1B (Fab 2) | Foxboro | 761 | 5.0 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.0 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 4.5 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: _____ Date: _____

S:\CUSTOMER\IU-W\WACKER\INSP-MON\99CPHSMR.DOC

All self-monitoring reports (SMR) must include the following to be considered complete. For more detailed information regarding these items, please refer to the colored reference sheet. If you have any questions, please contact your permit manager for assistance.

Self Monitoring Report Check List:

- ☐ Chain of Custody form
- ☐ Analytical Results with Method Detection Limits (MDL)
- ☐ QA/QC Results, if applicable
- ☐ Signed Signatory Certification Statement (Printed on bottom of SMR)
- ☐ Completed Self Monitoring Report form

Whenever appropriate:

- ☐ Hand Composite Sample form
- ☐ Copies of pH charts showing the violation
- ☐ Calculations of monthly average
- ☐ Any other required reports

To assure prompt delivery, mail all monitoring results to:

Industrial Source Control Division
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

Attn: <Your permit manager's name here>

WACKER
Wacker Siltronic Corporation

January 11, 1999 ER102:PB

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the December, 1998 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. With the exception of the December 6, 1998 pH excursion, Wacker Siltronic has operated in compliance with the Permit for this reporting period.

The December 6, 1998 pH outage was from approximately 4:05 AM to 4:45 AM. Measures were taken to return to the permissible pH range as expediently as was possible. WSC returned to levels compliant with the permit requirements on December 6, 1998 at 4:45 AM.

Four consecutive daily grab samples for pH were taken from December 14 – December 17, 1998. All four results were well within the permit limits.

On December 16, 1998 a meeting was held with the December 6 WWTP Operations Contact, WSC management as well as engineering and environmental support to review the pH excursion, preventative measures and corrective actions. The following corrective actions have been implemented:

- The OWW and WAD pH probes will be cleaned and calibrated on a weekly basis, every Friday, by the WWTP operators. This has been added to the WWTP weekly checklist (attached).
- In addition, the OWW and WAD pH probes will be calibrated weekly, every Tuesday, by Maintenance personnel (attached).

Lastly, this incident has been reviewed with all wastewater treatment operators to help insure that the wastewater monitoring equipment is maintained in operating condition at all times. Training is scheduled to review the WSC Slug Discharge Control Plan and reporting requirements listed in the wastewater discharge permit when a slug load or plant bypass condition exists. A copy of the training sign-in sheet is attached.

WSC believes that this was an unusual, isolated incident and is taking all measures to insure that a similar mishap does not occur. We look forward to discussing this issue with you further in our January 14, 1999 Settlement Conference and hope to clarify any outstanding issues.

Thank you for your assistance.

If you have any questions, please contact Petra Beissmann at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Petra Beissmann

Petra Beissmann
Environmental Engineer

Enclosures:
cc: POTW-IDR File



SCOEPA00035387

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

NDUSTRY NAME: Wacker Siltronic Corporation

'ERMIT NUMBER: 469-001

:EPORT DUE DATE: **JANUARY 15, 1999**

:AMPLING PERIOD: October - December, 1998

| For Industial Source Control Division Use Only | |
|---|---|
| Date Postmarked/Received | Date Entered |
| | Entered By: |
| Comments: | |

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| December 1998 | Fab 2 Discharge point | **GRAB** |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| pH | | SU | | | 5.5 - 11.5 | N/A | |
| TTOs (Volatiles) | -- | | mg/L | | 1.37 mg/L | N/A | **See certification statement** |

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| 23 December, 1998 | Fab 2 Discharge point | **COMPOSITE** |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| Arsenic (Total) | EPA 200.8 | < 0.001 | mg/L | 0.001 | 1.5 mg/L | N/A | |
| Cadmium (Total) | EPA 200.8 | < 0.001 | mg/L | 0.001 | 0.7 mg/L | N/A | |
| Chromium (Total) | EPA 200.8 | 0.003 | mg/L | 0.001 | 3.5 mg/L | N/A | |
| Mercury (Total) | EPA 245.1 | < 0.0005 | mg/L | 0.0005 | 0.015 mg/L | N/A | |

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:
Signature: Thomas G. McClure Date: 1/11/99



SCOEPA00035388

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

NDUSTRY NAME: Wacker Siltronic Corporation

'ERMIT NUMBER: 469-001

REPORT DUE DATE: JANUARY 15, 1999

SAMPLING PERIOD: December, 1998

| For Industrial Source Control Division Use Only | |
|---|---|
| Date Postmarked/Received | Date Entered |
| Entered By: | |
| Comments: | |

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| Fab 2 Discharge point | Foxboro | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| 6 December, 1998 | 0400 | 3.1 | 39 minutes | (YES) | NO | See cover letter and |
| | | | | YES | NO | previously submitted data. |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
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2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas C. McCann Date: 1/11/99

S:\CUSTOMER\IU-W\WACKER\INSP-MON\98CONTPH.DOC

SCOEPA00035389

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 12/23/98 |
| 7200 N.W. Front | Project Number: | N/A | Received: 12/23/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 1/7/99 15:57 |

## Total Metals per EPA 200 Series Methods
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **98-148** | | | **P812412-01** | | | | **Water** | |
| Chromium | 1280623 | 12/23/98 | 12/29/98 | EPA 200.8 | 0.00100 | 0.00130 | mg/l | |
| **98-149** | | | **P812412-02** | | | | **Water** | |
| Arsenic | 1280623 | 12/23/98 | 12/29/98 | EPA 200.8 | 0.00100 | ND | mg/l | |
| Cadmium | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| Chromium | " | " | " | EPA 200.8 | 0.00100 | 0.00290 | " | |
| Copper | " | " | " | EPA 200.8 | 0.00200 | 0.00720 | " | |
| Mercury | 1280619 | 1/6/99 | 1/7/99 | EPA 245.1 | 0.000500 | ND | " | |



FROM :NORTH CREEK ANALYTICAL TO :8417414 1999.01.08 11:34AM #995 P.01/01

SCOEPA00035390

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (425) 420-9200 FAX 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210

Jan-12-99 10:50

# CHAIN OF CUSTODY REPORT

**Work Order #**

REPORT TO: Wacker Siltronic
ATTENTION: Jim Rothschild
ADDRESS: 7200 N.W. Front Ave
Portland OR
PHONE: 217 7374 FAX: 417 4144
PROJECT NAME:
PROJECT NUMBER:
SAMPLED BY: Dianne Mullan

INVOICE TO: Wacker Siltronic
ATTENTION: Accts Payable
ADDRESS: Same
P.O. NUMBER: 210162 NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 (Standard) 7 5 4 3 2 1 Same Day
Fuels & Hydrocarbon Analyses: 5 (Standard) 3-4 2 1 Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

Analysis Request: Cr (T) / Total Acid Cd Cr Pb

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Cr (T) | Total Acid Cd Cr Pb | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| 1. | 98148 | 12-23-98 0730 | | X | | W | 1 | HNO3 |
| 2. | 98149 | 12-23-98 0730 | | | X | W | 1 | HNO3 |
| 3. | | | | | | | | |
| 4. | | | | | | | | |
| 5. | | | | | | | | |
| 6. | | | | | | | | |
| 7. | | | | | | | | |
| 8. | | | | | | | | |
| 9. | | | | | | | | |
| 10. | | | | | | | | |

RELINQUISHED BY (Signature): Dianne Mullan DATE: 12-23-98 RECEIVED BY (Signature): DATE:
PRINT NAME: Dianne Mullan FIRM: Wacker TIME: 0845 PRINT NAME: FIRM: TIME:
RELINQUISHED BY (Signature): Paul Conroy DATE: 12-23-98 RECEIVED BY (Signature): Sara McClung DATE: 12-23-98
PRINT NAME: PAUL CONROY FIRM: WCKR TIME: 1205 PRINT NAME: Sara McClung FIRM: NCA TIME: 1205
ADDITIONAL REMARKS: # 1) Please use detection limit of 0.001 ppm.

PAGE OF

P.01

SCOEPA00035391

Wacker Siltronic Corporation
Petra Mattes
PO Box 83180 M/S 30
Portland, OR 97283-0180
(503) 219-4469
Fax: 219-7599

# facsimile transmittal

| | | | |
|---|---|---|---|
| **To:** | Tim Dean | **Fax:** | 823-5559 |
| **From:** | Petra Beissmann | **Date:** | December 18, 1998 |
| **Re:** | Chain of custody | **Pages:** | 2 |
| **CC:** | | | |

☐ **Urgent** **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

**Notes:**

Dear Tim,

Attached is a copy of the chain of custody for the November 19, 1998 analysis.

Additionally, WSC requests a settlement conference regarding the December 6, 1998 pH excursion.

Thank you

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (425) 420-92[illegible] [illegible]X 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-920[illegible] FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210

# CHAIN OF CUSTODY REPORT

**Work Order #**

| | |
|---|---|
| **REPORT TO:** Wacker Siltronic | **INVOICE TO:** Wacker Siltronic |
| **ATTENTION:** Tom Rothschild | **ATTENTION:** Accts Payable |
| **ADDRESS:** 7200 N.W. Front Ave Portland, Or | **ADDRESS:** |
| **PHONE:** 219-7374 **FAX:** 417-4144 | **P.O. NUMBER:** 210162 **NCA QUOTE #:** |
| **PROJECT NAME:** | |
| **PROJECT NUMBER:** | |
| **SAMPLED BY:** Dianne Mullan | |

**TURNAROUND REQUEST in Business Days ***

Organic & Inorganic Analyses: 10 (Standard) | 7 | 5 | 4 | ~~3~~ | 2 | 1 | Same Day

Fuels & Hydrocarbon Analyses: 5 (Standard) | 3-4 | 2 | 1 | Same Day

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Analysis Request: 8270 | 1,2 Diphenylhydrazine | Sulfide (Dissolved) | 8260 + Acrylonitrile | 8270 | Chlordane | As, Hg, mo(total) Al, Fe, Zn | | | | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 98-135 | 11/19/98 0810 | | | | X | | | | X | | | | W | 2 | [illegible] |
| 2. | 98-136 | 11/19/98 0810 | | X | X | | X | | X | | | | | W | 6 | |
| 3. | 98-137 | 11/19/98 0810 | | X | X | | | | | | | | | W | 1 | |
| 4. | | | | | | | | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | |

| | |
|---|---|
| **RELINQUISHED BY (Signature):** Dianne Mullan **DATE:** 11/19/98 | **RECEIVED BY (Signature):** [signature] **DATE:** 11-19-98 |
| **PRINT NAME:** Dianne Mullan **FIRM:** Wacker **TIME:** 1115 | **PRINT NAME:** Mary Spangler **FIRM:** NCA **TIME:** 1115 |
| **RELINQUISHED BY (Signature):** **DATE:** | **RECEIVED BY (Signature):** **DATE:** |
| **PRINT NAME:** **FIRM:** **TIME:** | **PRINT NAME:** **FIRM:** **TIME:** |

**ADDITIONAL REMARKS:**

PAGE OF

COC Rev 8, 1/96

SCOEPA00035393

WACKER
Wacker Siltronic Corporation

December 14, 1998 ER095:PB

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the November, 1998 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

Also enclosed are:

- A copy of the PM that you had requested during the November 13 inspection, for the oil/water separator located outside the Maintenance Shop.
- The revised Sampling Location map for Appendix 2 of Permit 469-01.
- The signed Compliance Certification for Wastewater Discharge Limitations

In addition, as a recommendation to improve consistency with the revised Sampling Location map, the description of the point of compliance on Schedule A of the permit should read:

*"The point of compliance with the discharge limitations shall be the end of the waste water treatment process, either #1A or #2A dependent on production rates (see Appendix 2). Sample point #1A is the outlet from Fab 1 at the Parshall flume and sample point #2A is the Fab 2 Waste Water Treatment Plant outlet from the second stage OWW reaction tank."*

If you have any questions, please contact Petra Beissmann at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Petra Beissmann

Petra Beissmann
Environmental Engineer

enclosures:

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035394

Please return to Petra Beissmann MS30

Z 463 352 346

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to<br>TIM DEAN, BES | |
| Street & Number<br>6543 N Burlington Ave | |
| Post Office, State, & ZIP Code<br>Portland OR 97203-5452 | |
| Postage | $ 1.24 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 3.69 |
| Postmark or Date | DEC 14 1998 PORTLAND, OREGON MAIN OFFICE STA. USPS |

PS Form **3800**, April 1995

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUREAU OF ENVIRNMENTAL SERVICES
6543 N Burlington Ave
Portland OR 97203-5452

4a. Article Number

Z 463 352 346

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

12-15-98

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*

X Sharon A. McGregor

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: **DECEMBER 15, 1998**

SAMPLING PERIOD: November, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By:**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| Fab 2 Sampler | Foxboro | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.5 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that fied personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly ponsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas C. McCue Date: 12/14/98

S:\CUSTOMER\IU-W\WACKER\INSP-MON\98CONTPH.DOC

SCOEPA00035396

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

(N[illegible]TRY NAME: Wacker Siltronic Corporation

P[illegible]T NUMBER: 469-001

REPORT DUE DATE: 15 December, 1998

SAMPLING PERIOD: November, 1998

TODAY'S DATE: 11 December, 1998

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | 23 Nov 98 | SAMPLE LOCATION> | OMW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 24 Nov 1998 | DATE OF SAMPLE ANAL. > | 5 Dec 1998 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | | < 0.001 | 0.20 | 0.83 | NO | DATE: 23 November, 1998 |
| Copper | | 0.48 | 3.7 | -- | NO | DATE: 23 November, 1998 |
| Mercury | | < 0.0002 | 0.01 | -- | NO | DATE: 23 November, 1998 |
| | | | | | | DATE: |
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| | | | | | | DATE: |

[illegible]certify under penalty of law that this document and all attachments were prepared under my direction or supervision [illegible] accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information [illegible]mitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible [illegible] gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, [illegible] complete. I am aware that there are significant penalties for submitting false information, including the [illegible]sibility of fine and imprisonment for knowing violations.

For Wacker Siltronic Corporation:

[illegible]nature: Thomas G McCue Date: 12/14/98

[illegible]
6/24/94

SCOEPA00035397

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 11/23/98 to 11/24/98 |
| 7200 N.W. Front | Project Number: | N/A | Received: 11/24/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/11/98 13:01 |

**Total Metals per EPA 200 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **98-142** OWW City Split | | | **P811442-04** | | | | **Water** | |
| Arsenic | 1280127 | 12/2/98 | 12/5/98 | EPA 200.8 | 0.00100 | ND | mg/l | |
| **Copper** | " | " | " | EPA 200.8 | 0.00200 | **0.0485** | " | |
| Mercury | 1180755 | 11/30/98 | 12/1/98 | EPA 245.1 | 0.000200 | ND | " | |



SCOEPA00035398

# JOB DISPATCH

Date: 11/13/98 Shift: 1

Job #: OWT345 Priority: 3.00
Date Due: 11/13/98 Int: 364
Due at Meter: 0.0 Int: 0.0

DEPARTMENT: FACIL. / FACILITIES MAINTENANCE DEPT.
SYSTEM: SW / SEWER SYSTEM
EQUIPMENT #: 00001420 / SEWER GENERAL
Location: WSC
Craft ID: HK / HAL M KILBOURNE-ASSIGNMENT

Runtime: (Job can be done at any time)

---

Job Description:

: PM <AN> FACILITIES OIL/WATER SEPARATOR
: ==========
: 01- THIS IS AN OUTSIDE SERVICE.
: Schedule "SPENCER ENVIRONMENTAL" to
: clean the Oil/Water separator outside
: Maintenance Shop.
: Make sure to close the work order with
: the date when job is complete.

---

---

Maintenance Crew ID: FACIL. / FACILITIES MAINTENANCE

| Person ID | Person Name | Sched. Hours | Actual Hours | Ovrtm. Hours | Special Hours |
|---|---|---|---|---|---|
| | | | | | |
| Total Hours: | | 0.00 | | | |

---

Downtime: _____ minutes Cause category:_____

: _____ minutes Cause category:_____

Completed? (circle one) YES NO Initials:_____ Date:___/___/___

Comments: _____

_____

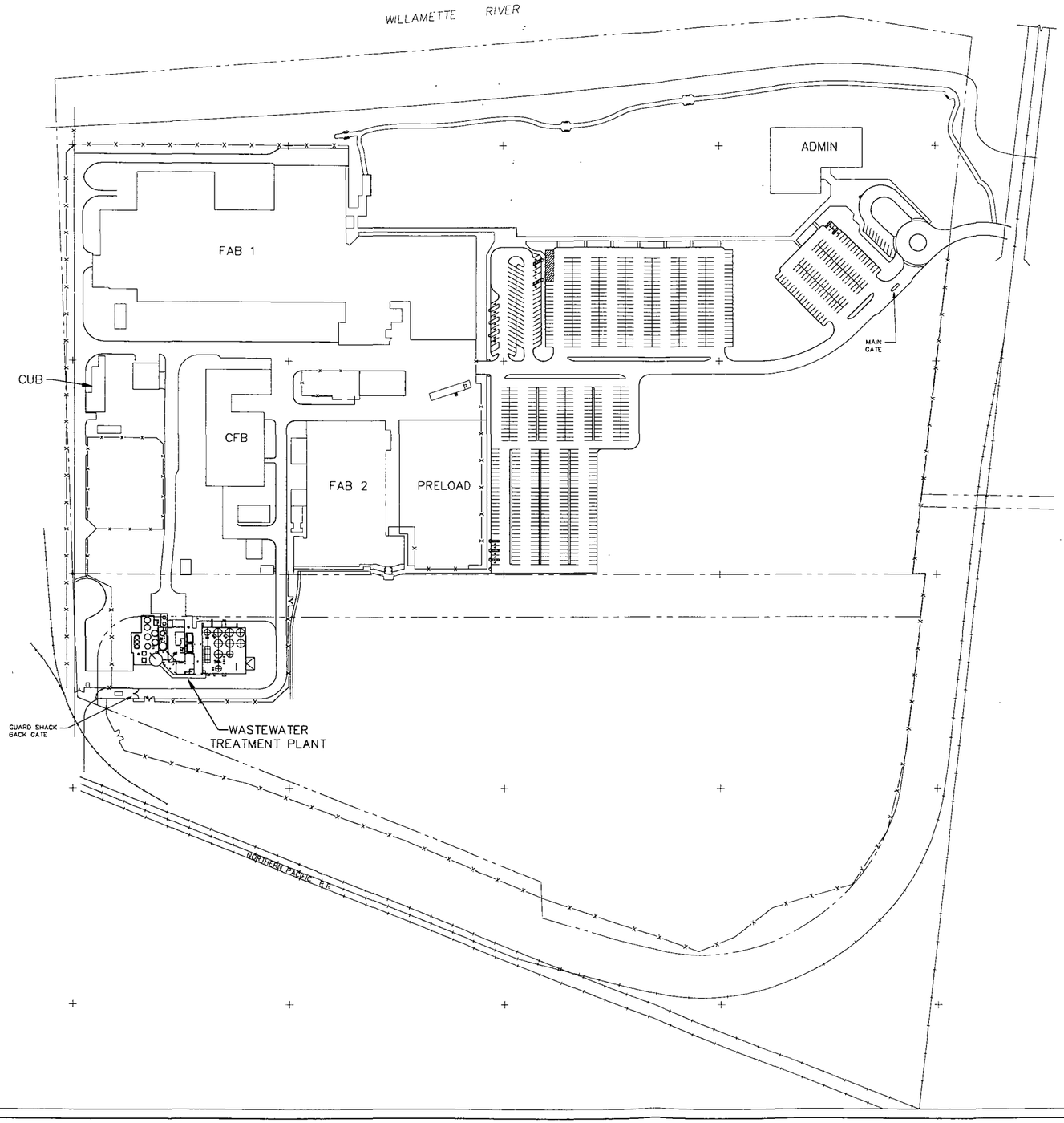
_____

_____

_____

_____

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO WACKER.
IT SHALL NOT BE REPRODUCED, USED OR DISCLOSED TO ANYONE
WITHOUT THE PRIOR WRITTEN PERMISSION OF WACKER.




| REV. | DESC | PROJ NO | BY | DATE | APP'D |
|---|---|---|---|---|---|

**Wacker Siltronic Corporation** WACKER

P.O. BOX 83180 PORTLAND, OREGON 97283-0180

| | BY | DATE |
|---|---|---|
| DRAWN | MW | 11/6/98 |
| DESIGN | RB | 11/6/98 |
| CHECK | RB | 11/30/98 |
| APP'D | | |
| SCALE | 1=100 | |
| FILE NO | 1C102 | |

TITLE: SITE/CIVIL
WASTEWATER DISCHARGE
SAMPLE POINT
LOCATION PLAN

SIZE DD | DRAWING NO 1C102

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO WACKER. IT SHALL NOT BE REPRODUCED, USED OR DISCLOSED TO ANYONE WITHOUT THE PRIOR WRITTEN PERMISSION OF WACKER.

T-39-8
ORGANIC WASTEWATER FORWARDING SUMP
FAB 1
8'-0"ø x 11'-0"

T-139-40
OWW SURGE TANK
FAB 2

T-39-10-1
OWW FIRST STAGE NEUTRALIZATION TANK
FAB 1
12'-6"ø x 15'-0"

T-39-10-2
OWW SECOND STAGE NEUTRALIZATION TANK
FAB 1
12'-6"ø x 15'-0"

T-39-300
OWW FIRST STAGE NEUTRALIZATION TANK
FAB 2
16'-0"ø x 20'-0"

T-39-301
OWW SECOND STAGE NEUTRALIZATION TANK
FAB 1
16'-0"ø x 20'-0"

## GENERAL NOTES:

A MAX FLOW FROM FAB 1 OWW FWD SUMP = 300GPM IF FLOW FROM FAB 1 OWW FWD SUMP TO WWTP2 IS 300 GPM, THEN FLOW FROM FAB 2 OWW FDW SUMP TO WWTP2 MUST BE LESS THAN THE "HIGH" FLOW OR WWTP2 OWW WILL BE OVER-CAPACITY IF FLOW FROM FAB 2 OWW FWD SUMP TO WWTP1 IS 300 GPM, THEN FLOW FROM FAB 1 OWW FWD SUMP TO WWTP1 MUST BE ZERO OR WWTP1 OWW WILL BE OVER-CAPACITY

B EXCURSIONS OF CCD TO OWW ARE NOT RECOMMENDED DUE TO THE HIGH PROBABILITY OF EXCEEDING $SO_4$ LIMIT TO THE CITY SEWER. 2-2.5 GPM OF CCD TO OWW WILL RESULT IN $SO_4$ CONCENTRATIONS AT ABOUT THE 500 MG/L LIMIT. 16 GPM TO OWW WILL RESULT IN $SO_4$ CONCENTRATIONS OF 3100-3200 MG/L TO THE CITY SEWER

## KEYED NOTES:

1 PH PROBE FOR CONTINUOUS MONITORING AND STRIP CHARTS.

FROM SULFURIC ACID STORAGE TANK
FROM SULFURIC ACID STORAGE TANK
I-284
MP-39-10-2
MP-39-10-1
FROM CAUSTIC FEED PUMPS
FROM DIVERSION TK
FROM CCD
GRAVITY FLOW FROM FAB 1
GRAVITY OVERFLOW FROM WAD
I-280
LC
P-39-8-1
P-39-8-2
T-39-8
FC
FI
(EMERGENCY ONLY 300 GPM-SEE NOTE 1)
MX-39-10-1
MX-39-10-2
PHC
T-39-10-1
T-39-10-2
PARSHALL FLUME
SAMPLER (1A)
EFFLUENT TO CITY SEWER
TO DIVERSION TK
OVERFLOW TO SANITARY SEWER

FROM WAD SAND FILTER REJECTS
REF I-957 STREAM 24
18/28/75/87
TO DIVERSION TK

FROM SULFURIC ACID STORAGE TANK
FROM SULFURIC ACID STORAGE TANK
I-284
MP-39-15-2
MP-39-15-1
0 001/0.003/0 005/0.05
0 001/0.003/0 005/0.05
FROM SWW SYSTEM
0/0/100/200
FROM CAUSTIC FEED PUMPS
0 0/0.0/0 1/0.1 (ESTIMATE)
FROM DIVERSION TK
FROM CCD REF. I-955 STREAM 4
0.0/0.0/2.4/15 9 (NOT RECOMMENDED-SEE NOTE 2)
I-949
SAMPLER (2A)
SAMPLE TAP
160/200/565/905
GRAVITY FLOW FROM FAB 2
GRAVITY OVERFLOW FROM WAD UPSET ONLY
LC
141/172/390/618
P-139-41-1
P-139-41-2
I-435A
HCl
IDC
HGI
FC
T-139-40
MX-39-300
MX-39-301
T-39-300
T-39-301
AE
pH
FI
OVERFLOW TO SANITARY SEWER

## MASS BALANCE NORMALIZED FLOWS

| COMPONENT | ① LBS/HR | ① W/W % | ② LBS/HR | ② W/W % | ⑧ LBS/HR | ⑧ W/W % | ⑤ LBS/HR | ⑥ W/W % | ③ LBS/HR | ④ W/W % | LBS/HR | W/W % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| INERTS (S) | | | 0.69 | 0 00 | | | | | 0 69 | 0.00 | | |
| HF | | | 0.17 | 0 00 | | | | | 0 00 | 0.00 | | |
| KOH | 1.29 | 0.00 | | | | | | | 0 00 | 0.00 | | |
| $H_2SO_4$ | | | | | | | 1.13 | 98.00 | 0.00 | 0.00 | | |
| PEROXIDE | 85.55 | 0.10 | | | | | | | 0.00 | 0.00 | | |
| $K_2SO_4$ | | | | | | | | | 2.01 | 0.00 | 11.0 | Mg/LSO4 |
| $Ca(NO_3)_2$ | | | 24.07 | 0 17 | | | | | 24.07 | 0.02 | | |
| $Al_2(SO_4)_3$ | | | 0 10 | 0.00 | | | | | 0.10 | 0.00 | | |
| Al $(OH)_3$ (S) | | | 0 02 | 0.00 | | | | | 0 02 | 0.00 | | |
| $Ca\ SO_4$ (S) | | | 0 06 | 0.00 | | | | | 0 06 | 0.00 | | |
| K CITRATE | | | 0.002 | 0.00 | | | | | 0 002 | 0.00 | | |
| NaCl | | | 0.90 | 0.01 | | | | | 0 90 | 0.00 | | |
| KCl | | | 25.79 | 0 18 | | | | | 25.79 | 0.03 | | |
| STEPANOL | | | 0.12 | 0.00 | | | | | 0.12 | 0.00 | | |
| SURFACTANT (9N9) | 51.16 | 0.06 | 0 002 | 0.00 | | | | | 51 16 | 0.05 | | |
| VALTRON | 0 01 | 0.00 | | | | | | | 0.01 | 0.00 | | |
| DEGREASER | 0.01 | 0.00 | | | | | | | 0 01 | 0.00 | | |
| TMAH | 73 45 | 0.09 | | | | | | | 73.45 | 0.07 | | |
| LUTENSOL | 0.005 | 0.00 | | | | | | | 0.005 | 0.00 | | |
| DETERGENT 09 | 57.91 | 0.07 | | | | | | | 57.91 | 0.06 | | |
| WATER SOLUBLE WAX | 0 01 | 0.00 | | | | | | | 0 01 | 0.00 | | |
| $CaF_2$ | | | 0 20 | 0 00 | | | | | 0 20 | 0.00 | | |
| $Al_2\ O_3$ | 0 01 | 0.00 | | | | | | | 0 01 | 0.00 | | |
| POLISHING AGENT | 1555 2 | 1 81 | | | | | | | 1555.2 | 1 55 | | |
| POLYMER | | | 0 04 | 0.00 | | | | | 0 04 | 0.00 | | |
| WATER | 84301 | 97 86 | 13962 | 99 63 | | | 0 02 | 2 00 | 98262 | 98 21 | | |
| TOTAL | 86125 | 100 | 14014 | 100 | 0 | | 1 15 | 100 | 100054 | 100 | | |
| TSS (PPM) | 18058 | | 69 | | 0 | | 0 | | 15553 | | | |
| SPECIFIC GRAVITY | 1 | | 1 | | - | | 1 8361 | | 1 | | | |
| GPH | 10338 | | 1682 | | 0 | | 0 08 | | 12010 | | | |
| GPM | 172 | | 28 | | 0 | | 0.001 | | 200 | | | |

## FLOWLINE LEGEND

XXX/XXX/XXX/XXX LOW/NORMALIZED/HIGH/DESIGN MAX (GPM)
NEW SECONDARY FLOW (HGI)
NEW PRIMARY FLOW (OTHERS)
NEW SECONDARY FLOW (OTHERS)
EXIST. PRIMARY FLOW
EXIST. SECONDARY FLOW

| REV. | | BY | DATE | APP'D |
|---|---|---|---|---|
| 1 | RECORD DRAWING UP TO DR-W191 & DCVR-W181 | RB | 07/19/96 | |
| 0 | ISSUED FOR CONSTRUCTION | BK | 10/31/95 | BK |

Wacker Siltronic Corporation
P.O. BOX 83180 PORTLAND, OREGON 97283-0180

| | BY | DATE |
|---|---|---|
| DRAWN | RDB | 7/7/95 |
| DESIGN | HG | |
| CHECK | WK | 8/1/95 |
| APP'D | | |
| SCALE | NONE | |

TITLE: WASTEWATER TREATMENT PROCESS FLOW DIAGRAM ORGANIC WASTEWATER SYSTEM

SIZE DD | DRAWING NO 1-958

95-2123
1-958
DWG REF NO

SCOEPA00035401

# COMPLIANCE CERTIFICATION
# WASTEWATER DISCHARGE LIMITATIONS

*The following table lists the new or more stringent wastewater discharge limitations for the City of Portland that became effective on **October 26, 1998**. Please indicate your facility's compliance status for each parameter listed below and **return this form to us by no later than December 15, 1998**.*

| Parameter | Former Local Limit (mg/l) | Effective Local Limit (mg/l) | Compliance | |
|---|---|---|---|---|
| | | | YES | NO |
| **Metal Local Limits** | | | | |
| Arsenic (total) | 0.30 | 0.20 | X | |
| Mercury (total) | 0.014 | 0.010 | X | |
| Molybdenum (total) | | 1.40 | X | |
| Nickel (total) | 3.00 | 2.80 | X | |
| Selenium (total) | | 0.60 | X | |
| Zinc (total) | 4.00 | 3.70 | X | |
| **Non-metal Local Limits** | | | | |
| Acrylonitrile | | 1.00 | X | |
| Chlordane | | 0.03 | X | |
| Chlorobenzene | | 0.20 | X | |
| Chloroform | | 0.20 | X | |
| 1,2-Dichloroethane | | 0.50 | X | |
| 2,4-Dinitrotoluene | | 0.13 | X | |
| Nitrobenzene | | 2.00 | X | |
| Pentachlorophenol | | 0.04 | X | |
| Sulfide (dissolved) | 50.00 | 4.00 | X | |
| Trichloroethene | | 0.20 | X | |

1. Is the facility meeting applicable pretreatment standards on a consistent basis? Yes [X] No [ ]

2. If no, do you require:

   a) Additional operation and maintenance (O&M) to achieve compliance? Yes [ ] No [ ]

   b) New or additional pretreatment facilities to achieve compliance? Yes [ ] No [ ]

3. If additional O&M or additional pretreatment will be required to meet pretreatment standards on a consistent basis, submit your proposed plan. The plan must include progress reporting dates for commencement and completion of major events leading to compliance with the standard.

   **Note:** The final compliance date in this schedule shall not be later than one year after the effective date of the local limits. Written progress reports are required within 14 days of each of the compliance dates specified in the compliance schedule.

4. I have provided a compliance schedule. Yes [ ] No [ ]

Authorized Representative Statement: {40 CFR 403.6(a)(2)(ii)}

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief is true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

For Wacker Siltronic Corporation:

THOMAS C. MCCUE
Name (print)

ENVIRONMENTAL MANAGER
Title

Thomas C. McCue
Signature

12/14/98
Date

(503) 219-7532
Phone

Company Name

Permit Number

12-7-98

Waiting for 8270
& Acrylonitrile
reported as
→ Azobenzene
ok'd w/ Renée from
City of Portland

12/10/98
Complete

SCOEPA00035403

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 11/19/98 |
| 7200 N.W. Front | Project Number: | N/A | Received: 11/19/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/1/98 14:01 |

## Organochlorine Pesticides per EPA Method 8081
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 9-136 owwgrab | | | P811360-02 | | | | Water | |
| Aldrin | 1180643 | 11/24/98 | 11/30/98 | | 0.100 | ND | ug/l | |
| alpha-BHC | " | " | " | | 0.100 | ND | " | |
| beta-BHC | " | " | " | | 0.100 | ND | " | |
| delta-BHC | " | " | " | | 0.100 | ND | " | |
| gamma-BHC (Lindane) | " | " | " | | 0.100 | ND | " | |
| alpha-Chlordane | " | " | " | | 0.100 | ND | " | |
| Chlordane (tech) | " | " | " | | 1.00 | ND | " | |
| gamma-Chlordane | " | " | " | | 0.100 | ND | " | |
| 4,4'-DDD | " | " | " | | 0.100 | ND | " | |
| 4,4'-DDE | " | " | " | | 0.100 | ND | " | |
| 4,4'-DDT | " | " | " | | 0.100 | ND | " | |
| Dieldrin | " | " | " | | 0.100 | ND | " | |
| Endosulfan I | " | " | " | | 0.100 | ND | " | |
| Endosulfan II | " | " | " | | 0.100 | ND | " | |
| Endosulfan sulfate | " | " | " | | 0.100 | ND | " | |
| Endrin | " | " | " | | 0.100 | ND | " | |
| Endrin aldehyde | " | " | " | | 0.100 | ND | " | |
| Heptachlor | " | " | " | | 0.100 | ND | " | |
| Heptachlor epoxide | " | " | " | | 0.100 | ND | " | |
| Methoxychlor | " | " | " | | 0.100 | ND | " | |
| Toxaphene | " | " | " | | 2.50 | ND | " | |
| Endrin ketone | " | " | " | | 0.100 | ND | " | |
| *Surrogate: 2,4,5,6-Tetrachloro-m-xylene* | " | " | " | *54.0-118* | | *51.8* | % | *1* |
| *Surrogate: Decachlorobiphenyl* | " | " | " | *62.0-133* | | *27.4* | " | *1* |

North Creek Analytical, Inc. **Refer to end of report for text of notes and definitions.*

Crystal Burkholder, Project Manager



SCOEPA00035404

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 11/19/98 |
| 7200 N.W. Front | Project Number: | N/A | Received: 11/19/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/1/98 14:01 |

**Volatile Organic Compounds per EPA Method 8260B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 9-136 aww grab | | | P811360-02 | | | | Water | |
| **Acetone** | 1180642 | 11/24/98 | 11/24/98 | | 25.0 | 397 | ug/l | |
| Benzene | " | " | " | | 1.00 | ND | " | |
| Bromobenzene | " | " | " | | 1.00 | ND | " | |
| Bromochloromethane | " | " | " | | 1.00 | ND | " | |
| Bromodichloromethane | " | " | " | | 1.00 | ND | " | |
| Bromoform | " | " | " | | 1.00 | ND | " | |
| Bromomethane | " | " | " | | 10.0 | ND | " | |
| 2-Butanone | " | " | " | | 25.0 | ND | " | |
| n-Butylbenzene | " | " | " | | 1.00 | ND | " | |
| sec-Butylbenzene | " | " | " | | 1.00 | ND | " | |
| tert-Butylbenzene | " | " | " | | 1.00 | ND | " | |
| Carbon tetrachloride | " | " | " | | 2.00 | ND | " | |
| Chlorobenzene | " | " | " | | 1.00 | ND | " | |
| Chloroethane | " | " | " | | 5.00 | ND | " | |
| **Chloroform** | " | " | " | | 1.00 | 5.43 | " | .0543 mg/L |
| Chloromethane | " | " | " | | 5.00 | ND | " | |
| 2-Chlorotoluene | " | " | " | | 1.00 | ND | " | |
| 4-Chlorotoluene | " | " | " | | 1.00 | ND | " | |
| 1,2-Dibromo-3-chloropropane | " | " | " | | 2.00 | ND | " | |
| Dibromochloromethane | " | " | " | | 1.00 | ND | " | |
| 1,2-Dibromoethane | " | " | " | | 1.00 | ND | " | |
| Dibromomethane | " | " | " | | 1.00 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 1.00 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 1.00 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 1.00 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 5.00 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 1.00 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 1.00 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 1.00 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 1.00 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 1.00 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 1.00 | ND | " | |
| 1,3-Dichloropropane | " | " | " | | 1.00 | ND | " | |
| 2,2-Dichloropropane | " | " | " | | 1.00 | ND | " | |
| 1,1-Dichloropropene | " | " | " | | 1.00 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 1.00 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 1.00 | ND | " | |
| Ethylbenzene | " | " | " | | 1.00 | ND | " | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

Crystal Burkholder, Project Manager



SCOEPA00035405

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 11/19/98 |
| 7200 N.W. Front | Project Number: | N/A | Received: 11/19/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/1/98 14:01 |

**Volatile Organic Compounds per EPA Method 8260B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **9-136 (continued)** DWW, grab | | | **I'811360-02** | | | | **Water** | |
| Hexachlorobutadiene | 1180642 | 11/24/98 | 11/24/98 | | 2.00 | ND | ug/l | |
| 2-Hexanone | " | " | " | | 10.0 | ND | " | |
| Isopropylbenzene | " | " | " | | 1.00 | ND | " | |
| p-Isopropyltoluene | " | " | " | | 1.00 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 5.00 | ND | " | |
| Methylene chloride | " | " | " | | 5.00 | ND | " | |
| Naphthalene | " | " | " | | 1.00 | ND | " | |
| n-Propylbenzene | " | " | " | | 1.00 | ND | " | |
| Styrene | " | " | " | | 1.00 | ND | " | |
| 1,1,1,2-Tetrachloroethane | " | " | " | | 1.00 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 1.00 | ND | " | |
| Tetrachloroethene | " | " | " | | 1.00 | ND | " | |
| Toluene | " | " | " | | 1.00 | ND | " | |
| 1,2,3-Trichlorobenzene | " | " | " | | 1.00 | ND | " | |
| 1,2,4-Trichlorobenzene | " | " | " | | 1.00 | ND | " | |
| 1,1,1-Trichloroethane | " | " | " | | 1.00 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 1.00 | ND | " | |
| Trichloroethene | " | " | " | | 1.00 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 5.00 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 1.00 | ND | " | |
| 1,2,4-Trimethylbenzene | " | " | " | | 1.00 | ND | " | |
| 1,3,5-Trimethylbenzene | " | " | " | | 1.00 | ND | " | |
| Vinyl chloride | " | " | " | | 1.00 | ND | " | |
| o-Xylene | " | " | " | | 1.00 | ND | " | |
| m,p-Xylene | " | " | " | | 2.00 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *75.0-135* | | *109* | % | |
| *Surrogate: 1,2-DCA-d4* | " | " | " | *70.0-135* | | *104* | " | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *80.0-125* | | *109* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *80.0-120* | | *97.5* | " | |

North Creek Analytical, Inc. **Refer to end of report for text of notes and definitions.*

Crystal Burkholder, Project Manager



SCOEPA00035406

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 11/19/98 |
| 7200 N.W. Front | Project Number: | N/A | Received: 11/19/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/1/98 14:01 |

## Notes and Definitions

| # | Note |
|---|---|
| 1 | Surrogate recovery is outside control limits due to matrix interference. |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| Recov. | Recovery |

North Creek Analytical, Inc.

Crystal Burkholder, Project Manager



SCOEPA00035407

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 11/19/98 |
| 7200 N.W. Front | Project Number: | N/A | Received: 11/19/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/1/98 14:01 |

**Conventional Chemistry Parameters per APHA/EPA Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **9-135** OWW, grab | | | **P811360-01** | | | | **Water** | |
| Sulfide | 1180608 | 11/21/98 | 11/21/98 | EPA 376.1 | 1.00 | ND | mg/l | |



SCOEPA00035408

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 11/19/98 |
| 7200 N.W. Front | Project Number: | N/A | Received: 11/19/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/7/98 10:08 |

**Total Metals per EPA 200 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **2-135** OWW, Composite | | | **P811360-01** | | | | **Water** | |
| Arsenic | 1280122 | 12/2/98 | 12/4/98 | EPA 200.8 | 0.00100 | ND | mg/l | |
| **Molybdenum** | " | " | " | EPA 200.8 | 0.00500 | **0.0207** | " | |
| **Nickel** | " | " | " | EPA 200.8 | 0.00200 | **0.00750** | " | |
| Selenium | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| Zinc | " | " | " | EPA 200.8 | 0.0200 | ND | " | |
| Mercury | 1180596 | 11/20/98 | 11/21/98 | EPA 245.1 | 0.000200 | ND | " | |



SCOEPA00035409

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (425) 420-9200 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210

# CHAIN OF CUSTODY REPORT

**Work Order #**

REPORT TO: Wacker Siltronic
ATTENTION: Tom Rothschild
ADDRESS: 7200 N.W. Front Ave
Portland, Or
PHONE: 219-7374 FAX: 417-4144

INVOICE TO: Wacker Siltronic
ATTENTION: Accts. Payable
ADDRESS:
P.O. NUMBER: 210162 NCA QUOTE #:

PROJECT NAME:
PROJECT NUMBER:
SAMPLED BY: Dianne Mullan

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: 10 (Standard) | 7 | 5 | 4 | 3 (X) | 2 | 1 | Same Day

Fuels & Hydrocarbon Analyses: 5 (Standard) | 3-4 | 2 | 1 | Same Day

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Analysis Request: 8270 | 1,2 Diphenylhydrazine Sulfide (Dissolved) | 8260+ Acrylonitrile | 8270 | Chlordane, BOD, As, Hg, TPO4 (TSP), NH3, 2 | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 98-135 | 11/19/98 0810 | | | X | | | X | W | 2 | |
| 2. | 98-136 | 11/19/98 0810 | | X | X | X | X | | W | 6 | |
| 3. | 98-137 | 11/19/98 0810 | | X | X | | | | W | 1 | |
| 4. | | | | | | | | | | | |
| 5. | | | | | | | | | | | |
| 6. | | | | | | | | | | | |
| 7. | | | | | | | | | | | |
| 8. | | | | | | | | | | | |
| 9. | | | | | | | | | | | |
| 10. | | | | | | | | | | | |

RELINQUISHED BY (Signature): Dianne Mullan DATE: 11/19/98
PRINT NAME: Dianne Mullan FIRM: Wacker TIME: 1115

RECEIVED BY (Signature): DATE: 11.19.98
PRINT NAME: Mary Spangler FIRM: NCA TIME: 1115

RELINQUISHED BY (Signature): DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY (Signature): DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

PAGE OF

COC Rev 8, 1/96

SCOEPA00035410

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL • (425) 481-9200 • FAX 485-2992
SPOKANE • (509) 924-9200 • FAX 924-9290
PORTLAND • (503) 643-9200 • FAX 644-2202

# FAX

**Date:** 12/7/98

**Total Pages** 2

**To:** Diane

**From:** Crystal

**Company:** Wacker Siltronic

**Company:**

**Fax:** 417-4141

**Fax:**

☐ **Urgent** ☐ **Please Confirm Receipt** ☐ **Please Reply ASAP**

**Remarks:**

Here all the requested metals results. The 8270s have not been analyzed yet. We have been very swamped in that dept. The samples won't be run until later this week, I'll fax them as soon as I get them.

98-136
98-137

Crystal

**Confidentiality Notice:**
This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this message in error, please notify us immediately by telephone and return the original message to us at one of the following addresses via postal service.

18939 120th Avenue NE
Bothell, WA 98011

East 11115 Montgomery, Suite B
Spokane, WA 99206

9405 SW Nimbus Avenue
Beaverton, OR 97008

SCOEPA00035411

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 11/19/98 |
| 7200 N.W. Front | Project Number: | N/A | Received: 11/19/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/10/98 14:38 |

## Semivolatile Organic Compounds per EPA Method 8270B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 9-136 OWW | | | P811360-02 | | | | Water | 1,2 |
| 1,2 Diphenylhydrazine (as Azobenzene) | 1180668 | 11/24/98 | 12/8/98 | | 50.0 | ND | ug/l | |
| Acenaphthene | " | " | " | | 50.0 | ND | " | |
| Acenaphthylene | " | " | " | | 50.0 | ND | " | |
| Anthracene | " | " | " | | 50.0 | ND | " | |
| Benzo (a) anthracene | " | " | " | | 50.0 | ND | " | |
| Benzo (a) pyrene | " | " | " | | 50.0 | ND | " | |
| Benzo (b) fluoranthene | " | " | " | | 50.0 | ND | " | |
| Benzo (ghi) perylene | " | " | " | | 50.0 | ND | " | |
| Benzo (k) fluoranthene | " | " | " | | 50.0 | ND | " | |
| Benzoic Acid | " | " | " | | 500 | ND | " | |
| Benzyl alcohol | " | " | " | | 100 | ND | " | |
| 4-Bromophenyl phenyl ether | " | " | " | | 50.0 | ND | " | |
| Butyl benzyl phthalate | " | " | " | | 50.0 | ND | " | |
| 4-Chloro-3-methylphenol | " | " | " | | 50.0 | ND | " | |
| 4-Chloroaniline | " | " | " | | 200 | ND | " | |
| Bis(2-chloroethoxy)methane | " | " | " | | 100 | ND | " | |
| Bis(2-chloroethyl)ether | " | " | " | | 50.0 | ND | " | |
| Bis(2-chloroisopropyl)ether | " | " | " | | 100 | ND | " | |
| 2-Chloronaphthalene | " | " | " | | 50.0 | ND | " | |
| 2-Chlorophenol | " | " | " | | 50.0 | ND | " | |
| 4-Chlorophenyl phenyl ether | " | " | " | | 50.0 | ND | " | |
| Chrysene | " | " | " | | 50.0 | ND | " | |
| Di-n-butyl phthalate | " | " | " | | 50.0 | ND | " | |
| Di-n-octyl phthalate | " | " | " | | 50.0 | ND | " | |
| Dibenzo (a,h) anthracene | " | " | " | | 50.0 | ND | " | |
| Dibenzofuran | " | " | " | | 50.0 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 50.0 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 50.0 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 50.0 | ND | " | |
| 3,3'-Dichlorobenzidine | " | " | " | | 50.0 | ND | " | |
| 2,4-Dichlorophenol | " | " | " | | 50.0 | ND | " | |
| Diethyl phthalate | " | " | " | | 50.0 | ND | " | |
| 2,4-Dimethylphenol | " | " | " | | 100 | ND | " | |
| Dimethyl phthalate | " | " | " | | 50.0 | ND | " | |
| 4,6-Dinitro-2-methylphenol | " | " | " | | 100 | ND | " | |
| 2,4-Dinitrophenol | " | " | " | | 250 | ND | " | |
| 2,4-Dinitrotoluene | " | " | " | | 50.0 | ND | " | |
| 2,6-Dinitrotoluene | " | " | " | | 50.0 | ND | " | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

Crystal Burkholder, Project Manager



SCOEPA00035412

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 11/19/98 |
| 7200 N.W. Front | Project Number: | N/A | Received: 11/19/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/10/98 14:38 |

**Semivolatile Organic Compounds per EPA Method 8270B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **9-136 (continued)** | | | **P811360-02** | | | | **Water** | **1,2** |
| Bis(2-ethylhexyl)phthalate | 1180668 | 11/24/98 | 12/8/98 | | 100 | ND | ug/l | |
| Fluoranthene | " | " | " | | 50.0 | ND | " | |
| Fluorene | " | " | " | | 50.0 | ND | " | |
| Hexachlorobenzene | " | " | " | | 50.0 | ND | " | |
| Hexachlorobutadiene | " | " | " | | 100 | ND | " | |
| Hexachlorocyclopentadiene | " | " | " | | 100 | ND | " | |
| Hexachloroethane | " | " | " | | 100 | ND | " | |
| Indeno (1,2,3-cd) pyrene | " | " | " | | 50.0 | ND | " | |
| Isophorone | " | " | " | | 50.0 | ND | " | |
| 2-Methylnaphthalene | " | " | " | | 50.0 | ND | " | |
| 2-Methylphenol | " | " | " | | 100 | ND | " | |
| 4-Methylphenol | " | " | " | | 50.0 | ND | " | |
| Naphthalene | " | " | " | | 50.0 | ND | " | |
| 2-Nitroaniline | " | " | " | | 50.0 | ND | " | |
| 3-Nitroaniline | " | " | " | | 100 | ND | " | |
| 4-Nitroaniline | " | " | " | | 100 | ND | " | |
| Nitrobenzene | " | " | " | | 50.0 | ND | " | |
| 2-Nitrophenol | " | " | " | | 50.0 | ND | " | |
| 4-Nitrophenol | " | " | " | | 250 | ND | " | |
| N-Nitrosodi-n-propylamine | " | " | " | | 100 | ND | " | |
| N-Nitrosodiphenylamine | " | " | " | | 50.0 | ND | " | |
| Pentachlorophenol | " | " | " | | 100 | ND | " | |
| Phenanthrene | " | " | " | | 50.0 | ND | " | |
| Phenol | " | " | " | | 50.0 | ND | " | |
| Pyrene | " | " | " | | 50.0 | ND | " | |
| 1,2,4-Trichlorobenzene | " | " | " | | 50.0 | ND | " | |
| 2,4,5-Trichlorophenol | " | " | " | | 50.0 | ND | " | |
| 2,4,6-Trichlorophenol | " | " | " | | 50.0 | ND | " | |
| *Surrogate: 2-Fluorobiphenyl* | " | " | " | *26.0-135* | | *95.2* | % | |
| *Surrogate: 2-Fluorophenol* | " | " | " | *6.00-124* | | *83.6* | " | |
| *Surrogate: Nitrobenzene-d5* | " | " | " | *23.0-147* | | *90.9* | " | |
| *Surrogate: Phenol-d6* | " | " | " | *11.0-130* | | *101* | " | |
| *Surrogate: p-Terphenyl-d14* | " | " | " | *38.0-149* | | *105* | " | |
| *Surrogate: 2,4,6-Tribromophenol* | " | " | " | *19.0-126* | | *52.4* | " | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Crystal Burkholder, Project Manager



SCOEPA00035413

November 9, 1998 ER091:TM

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the October, 1998 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Beissmann at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035414

REturn to: Petra Beissmann MS30

Z 463 352 342

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to<br>TIM DEAN, BES | |
| Street & Number<br>6543 N Burlington Avenue | |
| Post Office, State, & ZIP Code<br>Portland RO 97203 | |
| Postage | $ .32 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 2.77 |
| Postmark or Date | OCT 1 0 1998 |

PS Form **3800**, April 1995

USPS

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUREAU OF ENVIRONMENTAL SERVICES
6543 N BURLINGTON AVENUE
PORTLAND OR 97203-5452

4a. Article Number

Z 463 352 342

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

11-12-98

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*

X

8. Addressee's Address *(Only if requested and fee is paid)*

PORTLAND OR 97232 PM

Thank you for using Return Receipt Service.

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: **NOVEMBER 15, 1998**

SAMPLING PERIOD: October, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| Fab 2 Pipe | Foxboro | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.5 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Thomas C. McClure (For Wacker Siltronic Corporation) Date: 11/9/98

S:\CUSTOMER\IU-W\WACKER\INSP-MON\98CONTPH.DOC

SCOEPA00035416

WACKER
Wacker Siltronic Corporation

October 7, 1998 ER087:TM

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the September, 1998 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Petra Beissmann at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035417

PLEASE RETURN TO PETRA BEISSMANN MS 30

Z 463 352 340

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to<br>TIM DEAN, BES | |
| Street & Number<br>6543 N BURLINGTON AVE | |
| Post Office, State, & ZIP Code<br>PORTLAND OR 97203-5452 | |
| Postage | $ .55 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 3.00 |
| Postmark or Date OCT - 7 1998 | |

PS Form **3800**, April 1995

USPS

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUREAU OF ENVIRONMENTAL SERVICES
6543 N BURLINGTON AVENUE
PORTLAND OR 97203-5452

4a. Article Number

Z 463 352 340

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

10-8-98

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*

X

8. Addressee's Address *(Only if requested and fee is paid)*

Thank you for using Return Receipt Service.

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

SCOEPA00035418

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: **OCTOBER 15, 1998**

SAMPLING PERIOD: July - September, 1998

**For Industial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| 10 Sept, 1998 | OWW 2nd Stage | **GRAB** |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| pH | Meter | 10.1 | SU | -- | 5.5 - 11.5 | N/A | |
| TTOs (Volatiles) | 8260B | < 0.025 | mg/L | 0.025 | 1.37 mg/L | N/A | See certification statement |

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| Sept, 1998 | OWW 2nd Stage | **COMPOSITE** |

**NOT REQUIRED PER SCHEDULE B, PERMIT #469-001. Results are from a City of Portland split sample

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| Arsenic (Total) | EPA200 | < 0.001 | mg/L | 0.001 | 0.3 mg/L | N/A | |
| Cadmium (Total) | EPA200 | 0.0334 | mg/L | 0.001 | 0.7 mg/L | N/A | |
| Chromium (Total) | EPA200 | 0.0088 | mg/L | 0.001 | 3.8 mg/L | N/A | |
| Mercury (Total) | EPA200 | < 0.0002 | mg/L | 0.0002 | 0.014 mg/L | N/A | |

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Thomas G. McCue Date: 10/7/98



SCOEPA00035419

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: **OCTOBER 15, 1998**

SAMPLING PERIOD: September, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| Fab 2 Pipe | Foxboro | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.5 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 10/7/98

S:\CUSTOMER\IU-W\WACKER\INSP-MON\98CONTPH.DOC

SCOEPA00035420

Rec'd 10/01/98
dm

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 9/9/98 to 9/10/98 |
| 7200 N.W. Front | Project Number: | NONE | Received: 9/10/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 10/1/98 12:59 |

**Total Metals per EPA 200 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **28-114** OWW City Split | | | P809176-01 | | | | Water | |
| Arsenic | 0980572 | 9/21/98 | 9/22/98 | EPA 200.8 | 0.00100 | ND | mg/l | |
| **Cadmium** | " | " | " | EPA 200.8 | 0.00100 | **0.0334** | " | |
| **Chromium** | " | " | 9/23/98 | EPA 200.8 | 0.00100 | **0.00880** | " | |
| **Copper** | " | " | " | EPA 200.8 | 0.00200 | **0.0209** | " | |
| **Lead** | " | " | 9/22/98 | EPA 200.8 | 0.00100 | **0.00170** | " | |
| **Nickel** | " | " | 9/23/98 | EPA 200.8 | 0.00200 | **0.00670** | " | |
| Silver | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| **Zinc** | " | " | 9/22/98 | EPA 200.8 | 0.00500 | **0.0312** | " | |
| Mercury | 0980364 | 9/16/98 | 9/16/98 | EPA 245.1 | 0.000200 | ND | " | |
| **28-116** CE | | | P809176-03 | | | | Water | |
| **Chromium** | 0980572 | 9/21/98 | 9/23/98 | EPA 200.8 | 0.00100 | **0.00130** | mg/l | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

Crystal Burkholder, Project Manager



SCOEPA00035421

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 9/9/98 to 9/10/98 |
| 7200 N.W. Front | Project Number: | NONE | Received: 9/10/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 10/1/98 12:59 |

## Volatile Organic Compounds per EPA Method 8260B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **98-115** OWW city Spirit grass | | | **P809176-02** | | | | **Water** | |
| Benzene | 0980441 | 9/18/98 | 9/18/98 | | 1.00 | ND | ug/l | |
| Bromobenzene | " | " | " | | 1.00 | ND | " | |
| Bromochloromethane | " | " | " | | 1.00 | ND | " | |
| Bromodichloromethane | " | " | " | | 1.00 | ND | " | |
| Bromoform | " | " | " | | 1.00 | ND | " | |
| Bromomethane | " | " | " | | 10.0 | ND | " | |
| 2-Butanone | " | " | " | | 25.0 | ND | " | |
| n-Butylbenzene | " | " | " | | 1.00 | ND | " | |
| sec-Butylbenzene | " | " | " | | 1.00 | ND | " | |
| tert-Butylbenzene | " | " | " | | 1.00 | ND | " | |
| Carbon tetrachloride | " | " | " | | 2.00 | ND | " | |
| Chlorobenzene | " | " | " | | 1.00 | ND | " | |
| Chloroethane | " | " | " | | 5.00 | ND | " | |
| **Chloroform** | " | " | " | | 1.00 | **3.63** | " | |
| Chloromethane | " | " | " | | 5.00 | ND | " | |
| 2-Chlorotoluene | " | " | " | | 1.00 | ND | " | |
| 4-Chlorotoluene | " | " | " | | 1.00 | ND | " | |
| 1,2-Dibromo-3-chloropropane | " | " | " | | 2.00 | ND | " | |
| Dibromochloromethane | " | " | " | | 1.00 | ND | " | |
| 1,2-Dibromoethane | " | " | " | | 1.00 | ND | " | |
| Dibromomethane | " | " | " | | 1.00 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 1.00 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 1.00 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 1.00 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 5.00 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 1.00 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 1.00 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 1.00 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 1.00 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 1.00 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 1.00 | ND | " | |
| 1,3-Dichloropropane | " | " | " | | 1.00 | ND | " | |
| 2,2-Dichloropropane | " | " | " | | 1.00 | ND | " | |
| 1,1-Dichloropropene | " | " | " | | 1.00 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 1.00 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 1.00 | ND | " | |
| Ethylbenzene | " | " | " | | 1.00 | ND | " | |
| Hexachlorobutadiene | " | " | " | | 2.00 | ND | " | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

Crystal Burkholder, Project Manager



SCOEPA00035422

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 9/9/98 to 9/10/98 |
| 7200 N.W. Front | Project Number: | NONE | Received: 9/10/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 10/1/98 12:59 |

## Volatile Organic Compounds per EPA Method 8260B
### North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **98-115 (continued)** OWW | | | P809176-02 | | | | Water | |
| 2-Hexanone City Split | 0980441 | 9/18/98 | 9/18/98 | | 5.00 | ND | ug/l | |
| Isopropylbenzene | " | " | " | | 1.00 | ND | " | |
| p-Isopropyltoluene | " | " | " | | 1.00 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 5.00 | ND | " | |
| Methylene chloride | " | " | " | | 5.00 | ND | " | |
| Naphthalene | " | " | " | | 1.00 | ND | " | |
| n-Propylbenzene | " | " | " | | 1.00 | ND | " | |
| Styrene | " | " | " | | 1.00 | ND | " | |
| 1,1,1,2-Tetrachloroethane | " | " | " | | 1.00 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 1.00 | ND | " | |
| Tetrachloroethene | " | " | " | | 1.00 | ND | " | |
| Toluene | " | " | " | | 1.00 | ND | " | |
| 1,2,3-Trichlorobenzene | " | " | " | | 1.00 | ND | " | |
| 1,2,4-Trichlorobenzene | " | " | " | | 1.00 | ND | " | |
| 1,1,1-Trichloroethane | " | " | " | | 1.00 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 1.00 | ND | " | |
| Trichloroethene | " | " | " | | 1.00 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 5.00 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 1.00 | ND | " | |
| 1,2,4-Trimethylbenzene | " | " | " | | 1.00 | ND | " | |
| 1,3,5-Trimethylbenzene | " | " | " | | 1.00 | ND | " | |
| Vinyl chloride | " | " | " | | 2.00 | ND | " | |
| o-Xylene | " | " | " | | 1.00 | ND | " | |
| m,p-Xylene | " | " | " | | 2.00 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *75.0-125* | | *90.0* | *%* | |
| *Surrogate: 1,2-DCA-d4* | " | " | " | *75.0-125* | | *76.0* | " | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *75.0-125* | | *90.0* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *75.0-125* | | *106* | " | |
| Acetone | " | " | " | | 500 | 1590 | ug/l | |
| *Surrogate: 4-BFB* | " | " | " | *75.0-125* | | *93.0* | *%* | |
| *Surrogate: 1,2-DCA-d4* | " | " | " | *75.0-125* | | *81.0* | " | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *75.0-125* | | *92.5* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *75.0-125* | | *105* | " | |



SCOEPA00035423

WACKER
Wacker Siltronic Corporation

September 4, 1998 ER083:PM

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the August, 1998 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

From August 23 through August 29, 1998 a site wide company shutdown was established to provide an opportunity for electrical power and maintenance work to be completed while various systems were idle.

Per my August 25th phone call, it was anticipated that a bypass of the wastewater treatment plant might be necessary to complete a minor repair. Fortunately, the repair was made quickly and the bypass was unnecessary. Treatment capability was provided during the entire shutdown to assure compliance with permit limits.

Thank you for your assistance and expeditious response to our request for a bypass. Your efforts are very much appreciated.

If you have any questions, please contact me at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Petra Mattes
Environmental Engineer

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035424

Please return to PEtra Mattes MS 30

Z 463 352 335

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to | Tim Dean - BES |
| Street & Number | 6543 Burlington |
| Post Office, State, & ZIP Code | Portland OR 97203 |
| Postage | $ .32 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 2.77 |
| Postmark or Date | SEP - 4 1998 |

PS Form **3800**, April 1995

USPS

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUREAU OF ENVIRONMENTAL SERVICES
6543 BURLINGTON AVENUE
PORTLAND OR 97203-5452

4a. Article Number

Z 463 352 335

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

9-8-98

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*

X

8. Addressee's Address *(Only if requested and fee is paid)*

Thank you for using Return Receipt Service.

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

SCOEPA00035425

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

NDUSTRY NAME: Wacker Siltronic Corporation

'ERMIT NUMBER: 469-001

REPORT DUE DATE: **SEPTEMBER 15, 1998**

SAMPLING PERIOD: August, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| Fab 2 Pipe | Foxboro | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.5 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Thomas G. McCue Date: 9/4/98

S:\CUSTOMER\IU-W\WACKER\INSP-MON\98CONTPH.DOC

SCOEPA00035426

WACKER
Wacker Siltronic Corporation

August 11, 1998 ER078:TM

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the July, 1998 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

We would also like to notify you that an all site company shutdown is scheduled for August 23 through August 29. This shutdown offers an opportunity for electrical power and maintenance work to be completed while various systems are idle.

During the shutdown, flow to the POTW is expected to be minimal. Nonetheless, treatment capability will be provided to pretreat any discharge to assure compliance with permit limits.

If you have any questions, please contact Petra Mattes at 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035427

Please return to: Petra Mattes MS 30

Z 463 352 332

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to<br>TIM DEAN, BES | |
| Street & Number<br>6543 N Burlington Ave | |
| Post Office, State, & ZIP Code<br>Portland OR 97203 | |
| Postage | $ .32 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing To Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $2.77 |
| Postmark or Date | AUG 12, USPS |

PS Form **3800**, April 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUREAU OF ENVIRONMENTAL SERVICES
6543 N Burlington Avenue
Portland, OR 97203-5452

4a. Article Number

Z 463 352 332

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

8-13-98

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*

X

8. Addressee's Address *(Only if requested and fee is paid)*

Thank you for using Return Receipt Service.

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

SCOEPA00035428

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: **AUGUST 15, 1998**

SAMPLING PERIOD: July, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By:**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| Fab 2 Pipe | Foxboro | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.5 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are ificant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Thomas C. McCue Date: 8/11/98

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All self-monitoring reports (SMR) must include the following to be considered complete. For more detailed information regarding these items, please refer to the colored reference sheet. If you have any questions, please contact your permit manager for assistance.

Self Monitoring Report Check List:

- ☐ Chain of Custody form
- ☐ Analytical Results with Method Detection Limits (MDL)
- ☐ QA/QC Results, if applicable
- ☐ Signed Signatory Certification Statement (Printed on bottom of SMR)
- ☐ Completed Self Monitoring Report form

Whenever appropriate:

- ☐ Hand Composite Sample form
- ☐ Copies of pH charts showing the violation
- ☐ Calculations of monthly average
- ☐ Any other required reports

To assure prompt delivery, mail all monitoring results to:

Industrial Source Control Division
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

Attn: <Your permit manager's name here>

WACKER
Wacker Siltronic Corporation

July 7, 1998 ER075:TM

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the June, 1998 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "*Return Receipt Requested*" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BES
6543 BURLINGTON AVE
PORTLAND OR 97203

4a. Article Number
Z 463 352 330

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
7-10-98

5. Received By: *(Print Name)*
CARYL L. BARNES

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X Caryl L Barnes

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

---

RETURN TO PETRA MATTES MS 30
Z 463 352 330

US Postal Service
**Receipt for Certified Mail**
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to<br>TIM DEAN, BES | |
| Street & Number<br>6543 BURLINGTON AVE | |
| Post Office, State, & ZIP Code<br>PORTLAND OR 97203 | |
| Postage | $ 1.01 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| **TOTAL** Postage & Fees | $ 3.46 |
| Postmark or Date | JUL - 8 1998 |

PS Form **3800**, April 1995

PORTLAND OREGON ST JOHNS STA
JUL - 8 1998
USPS

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

NDUSTRY NAME: Wacker Siltronic Corporation

'ERMIT NUMBER: 469-001

REPORT DUE DATE: **JULY 15, 1998**

SAMPLING PERIOD: June, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By:**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| Fab 2 Pipe | Foxboro | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.5 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly res ible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are si nt penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas C. McCune Date: 7/8/98

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SCOEPA00035433

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

NDUSTRY NAME: Wacker Siltronic Corporation

'ERMIT NUMBER: 469-001

REPORT DUE DATE: **JULY 15, 1998**

SAMPLING PERIOD: April - June, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| June 4, 1998 | Fab 2 Pipe | GRAB |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| pH | Continuous | SU | | | 5.5 - 11.5 | N/A | NO pH EXCURSIONS |
| TTOs (Volatiles) | 8260A,8270B | < 0.25 | mg/L | 0.25 | 1.37 mg/L | N/A | See certification statement |

| SAMPLE DATE | POINT OF COMPLIANCE | SAMPLE TYPE |
|---|---|---|
| June 4, 1998 | Fab 2 Pipe | COMPOSITE |

| PARAMETER | ANALYSIS METHOD | REPORTED CONCENTRATION | | MDL | LIMITS DAILY | LIMITS MONTHLY | COMMENTS |
|---|---|---|---|---|---|---|---|
| Arsenic (Total) | EPA6020 | 0.001 | mg/L | 0.001 | 0.3 mg/L | N/A | |
| Cadmium (Total) | EPA6020 | < 0.01 | mg/L | 0.01 | 0.7 mg/L | N/A | |
| Chromium (Total) | EPA6020 | 0.054 | mg/L | 0.001 | 3.8 mg/L | N/A | |
| Mercury (Total) | EPA7470A | < 0.0002 | mg/L | 0.0002 | 0.014 mg/L | N/A | |

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas C. McCue Date: 7/8/98



SCOEPA00035434

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

## Total Metals per EPA 6000/7000 Series Methods
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **98-72** | | | **P806086-01** | | | | **Water** | |
| **Chromium** - CE - | 0680466 | 6/16/98 | 6/20/98 | EPA 6020 | 0.00100 | **0.00210** | mg/l | |
| **98-74** - OWW - | | | **P806086-03** | | | | **Water** | |
| **Arsenic** | 0680466 | 6/16/98 | 6/20/98 | EPA 6020 | 0.00100 | **0.00110** | mg/l | |
| Cadmium | " | " | 6/22/98 | EPA 6020 | 0.0100 | ND | " | 1 |
| **Chromium** | " | " | 6/20/98 | EPA 6020 | 0.00100 | **0.0535** | " | |
| Mercury | 0680338 | 6/11/98 | 6/12/98 | EPA 7470A | 0.000200 | ND | " | |



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NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

## Volatile Organic Compounds per EPA Method 8260A
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 98-75 DWW grab | | | P806086-04 | | | | Water | |
| **Acetone** | 0680237 | 6/8/98 | 6/8/98 | | 250 | **893** | ug/l | 2 |
| Benzene | " | " | " | | 10.0 | ND | " | |
| Bromobenzene | " | " | " | | 10.0 | ND | " | |
| Bromochloromethane | " | " | " | | 10.0 | ND | " | |
| Bromodichloromethane | " | " | " | | 10.0 | ND | " | |
| Bromoform | " | " | " | | 10.0 | ND | " | |
| Bromomethane | " | " | " | | 100 | ND | " | |
| 2-Butanone | " | " | " | | 250 | ND | " | |
| n-Butylbenzene | " | " | " | | 10.0 | ND | " | |
| sec-Butylbenzene | " | " | " | | 10.0 | ND | " | |
| tert-Butylbenzene | " | " | " | | 10.0 | ND | " | |
| Carbon tetrachloride | " | " | " | | 10.0 | ND | " | |
| ›robenzene | " | " | " | | 10.0 | ND | " | |
| .oroethane | " | " | " | | 50.0 | ND | " | |
| Chloroform | " | " | " | | 10.0 | ND | " | |
| Chloromethane | " | " | " | | 50.0 | ND | " | |
| 2-Chlorotoluene | " | " | " | | 10.0 | ND | " | |
| 4-Chlorotoluene | " | " | " | | 10.0 | ND | " | |
| 1,2-Dibromo-3-chloropropane | " | " | " | | 20.0 | ND | " | |
| Dibromochloromethane | " | " | " | | 10.0 | ND | " | |
| 1,2-Dibromoethane | " | " | " | | 10.0 | ND | " | |
| Dibromomethane | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 50.0 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 10.0 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 10.0 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 10.0 | ND | " | |
| 1,3-Dichloropropane | " | " | " | | 10.0 | ND | " | |
| 2,2-Dichloropropane | " | " | " | | 10.0 | ND | " | |
| 1,1-Dichloropropene | " | " | " | | 10.0 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 10.0 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 10.0 | ND | " | |
| Ethylbenzene | " | " | " | | 10.0 | ND | " | |



SCOEPA00035436

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (425) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 906-9200 ■ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

**Volatile Organic Compounds per EPA Method 8260A**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **98-75 (continued)** | | | **P806086-04** | | | | **Water** | |
| Hexachlorobutadiene | 0680237 | 6/8/98 | 6/8/98 | | 20.0 | ND | ug/l | |
| 2-Hexanone | " | " | " | | 50.0 | ND | " | |
| Isopropylbenzene | " | " | " | | 10.0 | ND | " | |
| p-Isopropyltoluene | " | " | " | | 10.0 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 50.0 | ND | " | |
| Methylene chloride | " | " | " | | 50.0 | ND | " | |
| Naphthalene | " | " | " | | 10.0 | ND | " | |
| n-Propylbenzene | " | " | " | | 10.0 | ND | " | |
| Styrene | " | " | " | | 10.0 | ND | " | |
| 1,1,1,2-Tetrachloroethane | " | " | " | | 10.0 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 10.0 | ND | " | |
| Tetrachloroethene | " | " | " | | 10.0 | ND | " | |
| Toluene | " | " | " | | 10.0 | ND | " | |
| 1,2,3-Trichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,2,4-Trichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,1,1-Trichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 10.0 | ND | " | |
| Trichloroethene | " | " | " | | 10.0 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 50.0 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 10.0 | ND | " | |
| 1,2,4-Trimethylbenzene | " | " | " | | 10.0 | ND | " | |
| 1,3,5-Trimethylbenzene | " | " | " | | 10.0 | ND | " | |
| Vinyl chloride | " | " | " | | 20.0 | ND | " | |
| o-Xylene | " | " | " | | 10.0 | ND | " | |
| m,p-Xylene | " | " | " | | 20.0 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *75.0-125* | | *89.5* | *%* | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *75.0-125* | | *109* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *75.0-125* | | *101* | " | |

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

**Semivolatile Organic Compounds per EPA Method 8270B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 98-75 OWW stub | | | P806086-04 | | | | Water | 3 |
| Acenaphthene | 0680265 | 6/9/98 | 6/20/98 | | 50.0 | ND | ug/l | |
| Acenaphthylene | " | " | " | | 50.0 | ND | " | |
| Anthracene | " | " | " | | 50.0 | ND | " | |
| Benzo (a) anthracene | " | " | " | | 50.0 | ND | " | |
| Benzo (a) pyrene | " | " | " | | 50.0 | ND | " | |
| Benzo (b) fluoranthene | " | " | " | | 50.0 | ND | " | |
| Benzo (ghi) perylene | " | " | " | | 50.0 | ND | " | |
| Benzo (k) fluoranthene | " | " | " | | 50.0 | ND | " | |
| Benzoic Acid | " | " | " | | 250 | ND | " | |
| Benzyl alcohol | " | " | " | | 100 | ND | " | |
| 4-Bromophenyl phenyl ether | " | " | " | | 50.0 | ND | " | |
| Butyl benzyl phthalate | " | " | " | | 50.0 | ND | " | |
| `hloro-3-methylphenol | " | " | " | | 50.0 | ND | " | |
| _hloroaniline | " | " | " | | 200 | ND | " | |
| Bis(2-chloroethoxy)methane | " | " | " | | 100 | ND | " | |
| Bis(2-chloroethyl)ether | " | " | " | | 50.0 | ND | " | |
| Bis(2-chloroisopropyl)ether | " | " | " | | 100 | ND | " | |
| 2-Chloronaphthalene | " | " | " | | 50.0 | ND | " | |
| 2-Chlorophenol | " | " | " | | 50.0 | ND | " | |
| 4-Chlorophenyl phenyl ether | " | " | " | | 50.0 | ND | " | |
| Chrysene | " | " | " | | 50.0 | ND | " | |
| Di-n-butyl phthalate | " | " | " | | 50.0 | ND | " | |
| Di-n-octyl phthalate | " | " | " | | 50.0 | ND | " | |
| Dibenzo (a,h) anthracene | " | " | " | | 50.0 | ND | " | |
| Dibenzofuran | " | " | " | | 50.0 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 50.0 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 50.0 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 50.0 | ND | " | |
| 3,3'-Dichlorobenzidine | " | " | " | | 50.0 | ND | " | |
| 2,4-Dichlorophenol | " | " | " | | 50.0 | ND | " | |
| Diethyl phthalate | " | " | " | | 50.0 | ND | " | |
| 2,4-Dimethylphenol | " | " | " | | 100 | ND | " | |
| Dimethyl phthalate | " | " | " | | 50.0 | ND | " | |
| 4,6-Dinitro-2-methylphenol | " | " | " | | 100 | ND | " | |
| 2,4-Dinitrophenol | " | " | " | | 250 | ND | " | |
| 2,4-Dinitrotoluene | " | " | " | | 50.0 | ND | " | |
| 2,6-Dinitrotoluene | " | " | " | | 50.0 | ND | " | |
| Bis(2-ethylhexyl)phthalate | " | " | " | | 100 | ND | " | |



SCOEPA00035438

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

**Semivolatile Organic Compounds per EPA Method 8270B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **98-75 (continued)** | | | **P806086-04** | | | | **Water** | **3** |
| Fluoranthene | 0680265 | 6/9/98 | 6/20/98 | | 50.0 | ND | ug/l | |
| Fluorene | " | " | " | | 50.0 | ND | " | |
| Hexachlorobenzene | " | " | " | | 50.0 | ND | " | |
| Hexachlorobutadiene | " | " | " | | 100 | ND | " | |
| Hexachlorocyclopentadiene | " | " | " | | 100 | ND | " | |
| Hexachloroethane | " | " | " | | 100 | ND | " | |
| Indeno (1,2,3-cd) pyrene | " | " | " | | 50.0 | ND | " | |
| Isophorone | " | " | " | | 50.0 | ND | " | |
| 2-Methylnaphthalene | " | " | " | | 50.0 | ND | " | |
| 2-Methylphenol | " | " | " | | 100 | ND | " | |
| 4-Methylphenol | " | " | " | | 50.0 | ND | " | |
| Naphthalene | " | " | " | | 50.0 | ND | " | |
| Nitroaniline | " | " | " | | 50.0 | ND | " | |
| Nitroaniline | " | " | " | | 100 | ND | " | |
| 4-Nitroaniline | " | " | " | | 100 | ND | " | |
| Nitrobenzene | " | " | " | | 50.0 | ND | " | |
| 2-Nitrophenol | " | " | " | | 50.0 | ND | " | |
| 4-Nitrophenol | " | " | " | | 100 | ND | " | |
| N-Nitrosodi-n-propylamine | " | " | " | | 100 | ND | " | |
| N-Nitrosodiphenylamine | " | " | " | | 50.0 | ND | " | |
| Pentachlorophenol | " | " | " | | 100 | ND | " | |
| Phenanthrene | " | " | " | | 50.0 | ND | " | |
| Phenol | " | " | " | | 50.0 | ND | " | |
| Pyrene | " | " | " | | 50.0 | ND | " | |
| 1,2,4-Trichlorobenzene | " | " | " | | 50.0 | ND | " | |
| 2,4,5-Trichlorophenol | " | " | " | | 50.0 | ND | " | |
| 2,4,6-Trichlorophenol | " | " | " | | 50.0 | ND | " | |
| *Surrogate: 2-Fluorobiphenyl* | " | " | " | *43.0-116* | | *97.0* | *%* | |
| *Surrogate: 2-Fluorophenol* | " | " | " | *21.0-100* | | *83.6* | " | |
| *Surrogate: Nitrobenzene-d5* | " | " | " | *35.0-114* | | *78.0* | " | |
| *Surrogate: Phenol-d6* | " | " | " | *10.0-94.0* | | *86.8* | " | |
| *Surrogate: p-Terphenyl-d14* | " | " | " | *33.0-141* | | *98.7* | " | |
| *Surrogate: 2,4,6-Tribromophenol* | " | " | " | *10.0-123* | | *76.2* | " | |



**Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager

18939 120th Avenue N.E. Suite 101 Bothell WA 98011-9508
East 11115 Montgomery, Suite B Spokane WA 99206-4776
9405 S.W. Nimbus Avenue Beaverton OR 97008-7132



SCOEPA00035439

NORTH CREEK ANALYTICAL
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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

## Total Metals per EPA 6000/7000 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0680338** | **Date Prepared: 6/11/98** | | | | | **Extraction Method: Metals** | | | | |
| **Blank** | **0680338-BLK1** | | | | | | | | | |
| Mercury | 6/12/98 | | | **ND** | mg/l | **0.000200** | | | | |
| **LCS** | **0680338-BS1** | | | | | | | | | |
| Mercury | 6/12/98 | 0.00500 | | 0.00510 | mg/l | 80.0-120 | 102 | | | |
| **Duplicate** | **0680338-DUP1** | | **P806068-02** | | | | | | | |
| Mercury | 6/12/98 | | ND | ND | mg/l | | | 20.0 | | |
| **Matrix Spike** | **0680338-MS1** | | **P806068-02** | | | | | | | |
| Mercury | 6/12/98 | 0.00500 | ND | 0.00520 | mg/l | 75.0-125 | **104** | | | |
| **Matrix Spike** | **0680338-MS2** | | **P806089-04** | | | | | | | |
| Mercury | 6/12/98 | 0.00500 | ND | 0.00520 | mg/l | 75.0-125 | **104** | | | |
| **Batch: 0680466** | **Date Prepared: 6/16/98** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **0680466-BLK1** | | | | | | | | | |
| Arsenic | 6/20/98 | | | **ND** | mg/l | **0.00100** | | | | |
| Cadmium | " | | | **ND** | " | **0.00100** | | | | |
| Chromium | " | | | **ND** | " | **0.00100** | | | | |
| **LCS** | **0680466-BS1** | | | | | | | | | |
| Arsenic | 6/20/98 | 0.100 | | 0.101 | mg/l | 80.0-120 | 101 | | | |
| Cadmium | 6/19/98 | 0.100 | | 0.100 | " | 80.0-120 | 100 | | | |
| Chromium | " | 0.100 | | 0.106 | " | 80.0-120 | 106 | | | |
| **Duplicate** | **0680466-DUP1** | | **P806069-01** | | | | | | | |
| Arsenic | 6/22/98 | | 0.0210 | 0.0210 | mg/l | | | 20.0 | **0** | |
| Cadmium | " | | ND | ND | " | | | 20.0 | | |
| Chromium | " | | 0.0250 | 0.0260 | " | | | 20.0 | **3.92** | |
| **Matrix Spike** | **0680466-MS1** | | **P806069-01** | | | | | | | |
| Arsenic | 6/20/98 | 0.100 | 0.0210 | 0.143 | mg/l | 75.0-125 | **122** | | | |
| Cadmium | " | 0.100 | ND | 0.0980 | " | 75.0-125 | **98.0** | | | |
| Chromium | " | 0.100 | 0.0250 | 0.118 | " | 75.0-125 | **93.0** | | | |
| **Matrix Spike** | **0680466-MS2** | | **P806112-01** | | | | | | | |
| Arsenic | 6/20/98 | 0.100 | ND | 0.123 | mg/l | 75.0-125 | **123** | | | |



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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

**Total Metals per EPA 6000/7000 Series Methods/Quality Control**
**North Creek Analytical - Portland**

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Matrix Spike (continued)** | **0680466-MS2** | | **P806112-01** | | | | | | | |
| Cadmium | 6/20/98 | 0.100 | ND | 0.108 | mg/l | 75.0-125 | **108** | | | |
| Chromium | " | 0.100 | 1.77 | 1.88 | " | 75.0-125 | **110** | | | |



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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

## Volatile Organic Compounds per EPA Method 8260A/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0680237** | **Date Prepared: 6/8/98** | | | | | **Extraction Method: GC/MS Volatiles** | | | | |
| **Blank** | **0680237-BLK1** | | | | | | | | | |
| Acetone | 6/8/98 | | | ND | ug/l | 25.0 | | | | |
| Benzene | " | | | ND | " | 1.00 | | | | |
| Bromobenzene | " | | | ND | " | 1.00 | | | | |
| Bromochloromethane | " | | | ND | " | 1.00 | | | | |
| Bromodichloromethane | " | | | ND | " | 1.00 | | | | |
| Bromoform | " | | | ND | " | 1.00 | | | | |
| Bromomethane | " | | | ND | " | 10.0 | | | | |
| 2-Butanone | " | | | ND | " | 25.0 | | | | |
| n-Butylbenzene | " | | | ND | " | 1.00 | | | | |
| sec-Butylbenzene | " | | | ND | " | 1.00 | | | | |
| tert-Butylbenzene | " | | | ND | " | 1.00 | | | | |
| Carbon tetrachloride | " | | | ND | " | 1.00 | | | | |
| Chlorobenzene | " | | | ND | " | 1.00 | | | | |
| Chloroethane | " | | | ND | " | 5.00 | | | | |
| Chloroform | " | | | ND | " | 1.00 | | | | |
| Chloromethane | " | | | ND | " | 5.00 | | | | |
| 2-Chlorotoluene | " | | | ND | " | 1.00 | | | | |
| 4-Chlorotoluene | " | | | ND | " | 1.00 | | | | |
| 1,2-Dibromo-3-chloropropane | " | | | ND | " | 2.00 | | | | |
| Dibromochloromethane | " | | | ND | " | 1.00 | | | | |
| 1,2-Dibromoethane | " | | | ND | " | 1.00 | | | | |
| Dibromomethane | " | | | ND | " | 1.00 | | | | |
| 1,2-Dichlorobenzene | " | | | ND | " | 1.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 1.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 1.00 | | | | |
| Dichlorodifluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,1-Dichloroethane | " | | | ND | " | 1.00 | | | | |
| 1,2-Dichloroethane | " | | | ND | " | 1.00 | | | | |
| 1,1-Dichloroethene | " | | | ND | " | 1.00 | | | | |
| cis-1,2-Dichloroethene | " | | | ND | " | 1.00 | | | | |
| trans-1,2-Dichloroethene | " | | | ND | " | 1.00 | | | | |
| 1,2-Dichloropropane | " | | | ND | " | 1.00 | | | | |
| 1,3-Dichloropropane | " | | | ND | " | 1.00 | | | | |
| 2,2-Dichloropropane | " | | | ND | " | 1.00 | | | | |
| 1,1-Dichloropropene | " | | | ND | " | 1.00 | | | | |
| cis-1,3-Dichloropropene | " | | | ND | " | 1.00 | | | | |
| trans-1,3-Dichloropropene | " | | | ND | " | 1.00 | | | | |



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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

## Volatile Organic Compounds per EPA Method 8260A/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **0680237-BLK1** | | | | | | | | | |
| Ethylbenzene | 6/8/98 | | | **ND** | ug/l | **1.00** | | | | |
| Hexachlorobutadiene | " | | | **ND** | " | **2.00** | | | | |
| 2-Hexanone | " | | | **ND** | " | **5.00** | | | | |
| Isopropylbenzene | " | | | **ND** | " | **1.00** | | | | |
| p-Isopropyltoluene | " | | | **ND** | " | **1.00** | | | | |
| 4-Methyl-2-pentanone | " | | | **ND** | " | **5.00** | | | | |
| Methylene chloride | " | | | **ND** | " | **5.00** | | | | |
| Naphthalene | " | | | **ND** | " | **1.00** | | | | |
| n-Propylbenzene | " | | | **ND** | " | **1.00** | | | | |
| Styrene | " | | | **ND** | " | **1.00** | | | | |
| 1,1,1,2-Tetrachloroethane | " | | | **ND** | " | **1.00** | | | | |
| 1,1,2,2-Tetrachloroethane | " | | | **ND** | " | **1.00** | | | | |
| Tetrachloroethene | " | | | **ND** | " | **1.00** | | | | |
| Toluene | " | | | **ND** | " | **1.00** | | | | |
| 1,2,3-Trichlorobenzene | " | | | **ND** | " | **1.00** | | | | |
| 1,2,4-Trichlorobenzene | " | | | **ND** | " | **1.00** | | | | |
| 1,1,1-Trichloroethane | " | | | **ND** | " | **1.00** | | | | |
| 1,1,2-Trichloroethane | " | | | **ND** | " | **1.00** | | | | |
| Trichloroethene | " | | | **ND** | " | **1.00** | | | | |
| Trichlorofluoromethane | " | | | **ND** | " | **5.00** | | | | |
| 1,2,3-Trichloropropane | " | | | **ND** | " | **1.00** | | | | |
| 1,2,4-Trimethylbenzene | " | | | **ND** | " | **1.00** | | | | |
| 1,3,5-Trimethylbenzene | " | | | **ND** | " | **1.00** | | | | |
| Vinyl chloride | " | | | **ND** | " | **2.00** | | | | |
| o-Xylene | " | | | **ND** | " | **1.00** | | | | |
| m,p-Xylene | " | | | **ND** | " | **2.00** | | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *18.7* | " | *75.0-125* | *93.5* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *21.4* | " | *75.0-125* | *107* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.5* | " | *75.0-125* | *103* | | | |
| **LCS** | **0680237-BS1** | | | | | | | | | |
| Benzene | 6/8/98 | 20.0 | | 20.4 | ug/l | 76.0-127 | 102 | | | |
| Chlorobenzene | " | 20.0 | | 23.2 | " | 75.0-130 | 116 | | | |
| 1,1-Dichloroethene | " | 20.0 | | 21.8 | " | 61.0-145 | 109 | | | |
| Toluene | " | 20.0 | | 22.4 | " | 76.0-125 | 112 | | | |
| Trichloroethene | " | 20.0 | | 18.6 | " | 71.0-120 | 93.0 | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.0* | " | *75.0-125* | *95.0* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *20.8* | " | *75.0-125* | *104* | | | |

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PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

## Volatile Organic Compounds per EPA Method 8260A/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **LCS (continued)** | **0680237-BS1** | | | | | | | | | |
| *Surrogate: Toluene-d8* | *6/8/98* | *20.0* | | *21.2* | *ug/l* | *75.0-125* | *106* | | | |
| **LCS Dup** | **0680237-BSD1** | | | | | | | | | |
| Benzene | 6/8/98 | 20.0 | | 21.1 | ug/l | 76.0-127 | 106 | 25.0 | 3.85 | |
| Chlorobenzene | " | 20.0 | | 23.5 | " | 75.0-130 | 118 | 25.0 | 1.71 | |
| 1,1-Dichloroethene | " | 20.0 | | 22.2 | " | 61.0-145 | 111 | 25.0 | 1.82 | |
| Toluene | " | 20.0 | | 22.5 | " | 76.0-125 | 113 | 25.0 | 0.889 | |
| Trichloroethene | " | 20.0 | | 19.8 | " | 71.0-120 | 99.0 | 25.0 | 6.25 | |
| *Surrogate: 4-BFB* | " | *20.0* | | *18.6* | " | *75.0-125* | *93.0* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *21.0* | " | *75.0-125* | *105* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.5* | " | *75.0-125* | *103* | | | |

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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

**Semivolatile Organic Compounds per EPA Method 8270B/Quality Control**
**North Creek Analytical - Portland**

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0680265** | **Date Prepared: 6/9/98** | | | | | **Extraction Method: EPA 3520/600 Series** | | | | |
| **Blank** | **0680265-BLK1** | | | | | | | | | |
| Acenaphthene | 6/19/98 | | | ND | ug/l | 5.00 | | | | |
| Acenaphthylene | " | | | ND | " | 5.00 | | | | |
| Anthracene | " | | | ND | " | 5.00 | | | | |
| Benzo (a) anthracene | " | | | ND | " | 5.00 | | | | |
| Benzo (a) pyrene | " | | | ND | " | 5.00 | | | | |
| Benzo (b) fluoranthene | " | | | ND | " | 5.00 | | | | |
| Benzo (ghi) perylene | " | | | ND | " | 5.00 | | | | |
| Benzo (k) fluoranthene | " | | | ND | " | 5.00 | | | | |
| Benzoic Acid | " | | | ND | " | 25.0 | | | | |
| Benzyl alcohol | " | | | ND | " | 10.0 | | | | |
| 4-Bromophenyl phenyl ether | " | | | ND | " | 5.00 | | | | |
| Butyl benzyl phthalate | " | | | ND | " | 5.00 | | | | |
| Chloro-3-methylphenol | " | | | ND | " | 5.00 | | | | |
| 4-Chloroaniline | " | | | ND | " | 20.0 | | | | |
| Bis(2-chloroethoxy)methane | " | | | ND | " | 10.0 | | | | |
| Bis(2-chloroethyl)ether | " | | | ND | " | 5.00 | | | | |
| Bis(2-chloroisopropyl)ether | " | | | ND | " | 10.0 | | | | |
| 2-Chloronaphthalene | " | | | ND | " | 5.00 | | | | |
| 2-Chlorophenol | " | | | ND | " | 5.00 | | | | |
| 4-Chlorophenyl phenyl ether | " | | | ND | " | 5.00 | | | | |
| Chrysene | " | | | ND | " | 5.00 | | | | |
| Di-n-butyl phthalate | " | | | ND | " | 5.00 | | | | |
| Di-n-octyl phthalate | " | | | ND | " | 5.00 | | | | |
| Dibenzo (a,h) anthracene | " | | | ND | " | 5.00 | | | | |
| Dibenzofuran | " | | | ND | " | 5.00 | | | | |
| 1,2-Dichlorobenzene | " | | | ND | " | 5.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 5.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 5.00 | | | | |
| 3,3'-Dichlorobenzidine | " | | | ND | " | 5.00 | | | | |
| 2,4-Dichlorophenol | " | | | ND | " | 5.00 | | | | |
| Diethyl phthalate | " | | | ND | " | 5.00 | | | | |
| 2,4-Dimethylphenol | " | | | ND | " | 10.0 | | | | |
| Dimethyl phthalate | " | | | ND | " | 5.00 | | | | |
| 4,6-Dinitro-2-methylphenol | " | | | ND | " | 10.0 | | | | |
| 2,4-Dinitrophenol | " | | | ND | " | 25.0 | | | | |
| 2,4-Dinitrotoluene | " | | | ND | " | 5.00 | | | | |
| 2,6-Dinitrotoluene | " | | | ND | " | 5.00 | | | | |



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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

**Semivolatile Organic Compounds per EPA Method 8270B/Quality Control**
**North Creek Analytical - Portland**

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | 0680265-BLK1 | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | 6/19/98 | | | ND | ug/l | 10.0 | | | | |
| Fluoranthene | " | | | ND | " | 5.00 | | | | |
| Fluorene | " | | | ND | " | 5.00 | | | | |
| Hexachlorobenzene | " | | | ND | " | 5.00 | | | | |
| Hexachlorobutadiene | " | | | ND | " | 10.0 | | | | |
| Hexachlorocyclopentadiene | " | | | ND | " | 10.0 | | | | |
| Hexachloroethane | " | | | ND | " | 10.0 | | | | |
| Indeno (1,2,3-cd) pyrene | " | | | ND | " | 5.00 | | | | |
| Isophorone | " | | | ND | " | 5.00 | | | | |
| 2-Methylnaphthalene | " | | | ND | " | 5.00 | | | | |
| 2-Methylphenol | " | | | ND | " | 10.0 | | | | |
| 4-Methylphenol | " | | | ND | " | 5.00 | | | | |
| Naphthalene | " | | | ND | " | 5.00 | | | | |
| itroaniline | " | | | ND | " | 5.00 | | | | |
| 3-Nitroaniline | " | | | ND | " | 10.0 | | | | |
| 4-Nitroaniline | " | | | ND | " | 10.0 | | | | |
| Nitrobenzene | " | | | ND | " | 5.00 | | | | |
| 2-Nitrophenol | " | | | ND | " | 5.00 | | | | |
| 4-Nitrophenol | " | | | ND | " | 10.0 | | | | |
| N-Nitrosodi-n-propylamine | " | | | ND | " | 10.0 | | | | |
| N-Nitrosodiphenylamine | " | | | ND | " | 5.00 | | | | |
| Pentachlorophenol | " | | | ND | " | 10.0 | | | | |
| Phenanthrene | " | | | ND | " | 5.00 | | | | |
| Phenol | " | | | ND | " | 5.00 | | | | |
| Pyrene | " | | | ND | " | 5.00 | | | | |
| 1,2,4-Trichlorobenzene | " | | | ND | " | 5.00 | | | | |
| 2,4,5-Trichlorophenol | " | | | ND | " | 5.00 | | | | |
| 2,4,6-Trichlorophenol | " | | | ND | " | 5.00 | | | | |
| *Surrogate: 2-Fluorobiphenyl* | " | *100* | | *67.0* | " | *43.0-116* | *67.0* | | | |
| *Surrogate: 2-Fluorophenol* | " | *200* | | *140* | " | *21.0-100* | *70.0* | | | |
| *Surrogate: Nitrobenzene-d5* | " | *100* | | *70.6* | " | *35.0-114* | *70.6* | | | |
| *Surrogate: Phenol-d6* | " | *200* | | *146* | " | *10.0-94.0* | *73.0* | | | |
| *Surrogate: p-Terphenyl-d14* | " | *100* | | *82.4* | " | *33.0-141* | *82.4* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | " | *200* | | *154* | " | *10.0-123* | *77.0* | | | |
| **LCS** | 0680265-BS1 | | | | | | | | | |
| Acenaphthene | 6/19/98 | 100 | | 81.6 | ug/l | 47.0-145 | 81.6 | | | |
| 4-Chloro-3-methylphenol | " | 200 | | 139 | " | 22.0-147 | 69.5 | | | |

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-72/73/74/75 | Sampled: 6/4/98 |
| 7200 N.W. Front | Project Number: | none | Received: 6/4/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/26/98 10:12 |

## Semivolatile Organic Compounds per EPA Method 8270B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **LCS (continued)** | **0680265-BS1** | | | | | | | | | |
| 2-Chlorophenol | 6/19/98 | 200 | | 146 | ug/l | 23.0-134 | 73.0 | | | |
| 1,4-Dichlorobenzene | " | 100 | | 65.1 | " | 20.0-124 | 65.1 | | | |
| 2,4-Dinitrotoluene | " | 100 | | 88.9 | " | 39.0-139 | 88.9 | | | |
| 4-Nitrophenol | " | 200 | | 121 | " | 0-132 | 60.5 | | | |
| N-Nitrosodi-n-propylamine | " | 100 | | 57.3 | " | 0-230 | 57.3 | | | |
| Pentachlorophenol | " | 200 | | 157 | " | 14.0-176 | 78.5 | | | |
| Phenol | " | 200 | | 132 | " | 5.00-112 | 66.0 | | | |
| Pyrene | " | 100 | | 84.5 | " | 55.0-133 | 84.5 | | | |
| 1,2,4-Trichlorobenzene | " | 100 | | 70.6 | " | 44.0-142 | 70.6 | | | |
| *Surrogate: 2-Fluorobiphenyl* | " | *100* | | *72.0* | " | *43.0-116* | *72.0* | | | |
| *Surrogate: 2-Fluorophenol* | " | *200* | | *152* | " | *21.0-100* | *76.0* | | | |
| *Surrogate: Nitrobenzene-d5* | " | *100* | | *73.6* | " | *35.0-114* | *73.6* | | | |
| *Surrogate: Phenol-d6* | " | *200* | | *144* | " | *10.0-94.0* | *72.0* | | | |
| *Surrogate: p-Terphenyl-d14* | " | *100* | | *82.8* | " | *33.0-141* | *82.8* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | " | *200* | | *154* | " | *10.0-123* | *77.0* | | | |
| **LCS Dup** | **0680265-BSD1** | | | | | | | | | |
| Acenaphthene | 6/19/98 | 100 | | 79.7 | ug/l | 47.0-145 | 79.7 | 60.0 | 2.36 | |
| 4-Chloro-3-methylphenol | " | 200 | | 134 | " | 22.0-147 | 67.0 | 60.0 | 3.66 | |
| 2-Chlorophenol | " | 200 | | 141 | " | 23.0-134 | 70.5 | 60.0 | 3.48 | |
| 1,4-Dichlorobenzene | " | 100 | | 62.4 | " | 20.0-124 | 62.4 | 60.0 | 4.24 | |
| 2,4-Dinitrotoluene | " | 100 | | 88.4 | " | 39.0-139 | 88.4 | 60.0 | 0.564 | |
| 4-Nitrophenol | " | 200 | | 96.0 | " | 0-132 | 48.0 | 60.0 | 23.0 | |
| N-Nitrosodi-n-propylamine | " | 100 | | 56.2 | " | 0-230 | 56.2 | 60.0 | 1.94 | |
| Pentachlorophenol | " | 200 | | 145 | " | 14.0-176 | 72.5 | 60.0 | 7.95 | |
| Phenol | " | 200 | | 141 | " | 5.00-112 | 70.5 | 60.0 | 6.59 | |
| Pyrene | " | 100 | | 84.6 | " | 55.0-133 | 84.6 | 60.0 | 0.118 | |
| 1,2,4-Trichlorobenzene | " | 100 | | 67.0 | " | 44.0-142 | 67.0 | 60.0 | 5.23 | |
| *Surrogate: 2-Fluorobiphenyl* | " | *100* | | *73.6* | " | *43.0-116* | *73.6* | | | |
| *Surrogate: 2-Fluorophenol* | " | *200* | | *152* | " | *21.0-100* | *76.0* | | | |
| *Surrogate: Nitrobenzene-d5* | " | *100* | | *74.4* | " | *35.0-114* | *74.4* | | | |
| *Surrogate: Phenol-d6* | " | *200* | | *145* | " | *10.0-94.0* | *72.5* | | | |
| *Surrogate: p-Terphenyl-d14* | " | *100* | | *84.9* | " | *33.0-141* | *84.9* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | " | *200* | | *163* | " | *10.0-123* | *81.5* | | | |

COIL

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

COPY

# CHAIN OF CUSTODY REPORT

**Work Order #** P806086

REPORT TO: Wacker Sitronic
ATTENTION: Tom Rothschild
ADDRESS: 7200 N.W. Front Ave
Portland OR
PHONE: 219-7374 FAX: 417-4144
PROJECT NAME
PROJECT NUMBER
SAMPLED BY: Dianne Mullan

INVOICE TO: Wacker Siltronic
ATTENTION: Accts Payable
ADDRESS:
P.O. NUMBER: 210162 NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: X (Standard) | 7 | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: 5 (Standard) | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

Analysis Request:

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Cr(T) | 8260 | 8270 | IPA | As, Cd, Cr, Hg | | | | | | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 98-72 | 6/4/98 0715 | | X | | | | | | | | | | W | 1 | HNO3 |
| 2 | 98-73 | ↓ | | | X | X | [illegible] | | | | | | | W | 5 | HCL |
| 3 | 98-74 | ↓ | | | | | | X | | | | | | W | 1 | HNO3 |
| 4 | 98-75 | ↓ | | | X | X | X | | | | | | | W | 5 | HCL |
| 5 | | | | | | | | | | | | | | | | |
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| 10 | | | | | | | | | | | | | | | | |

RELINQUISHED BY (Signature): Dianne Mullan DATE: 6/4/98
PRINT NAME: Dianne Mullan FIRM: Wacker TIME: 0955
RELINQUISHED BY (Signature): [signature] DATE: 6-4-98
PRINT NAME: Larry Spangler FIRM: NCA TIME: 1215

RECEIVED BY (Signature): [signature] DATE: 6-4-98
PRINT NAME: Larry Spangler FIRM: NCA TIME: 0955
RECEIVED BY (Signature): Sara Vanderhoof DATE: 6/4/98
PRINT NAME: Sara Vanderhoof FIRM: NCA TIME: 1215

ADDITIONAL REMARKS

PAGE OF

SCOEPA00035448

WACKER
Wacker Siltronic Corporation

June 11, 1998 ER068:TM

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the May 1998, Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

return to: Petra Mattes MS 30

Z 463 352 324

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to TIM DEAN, BES | |
| Street & Number 6543 N Burlington Ave | |
| Post Office, State, & ZIP Code Portland, OR 97203-5452 | |
| Postage | $ .78 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $3.23 |
| Postmark or Date | |

PS Form **3800**, April 1995

POSTMARK OR SAINT JOHNS STA JUN 15 1998 USPS

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN, BES
6543 N BURLINGTON AVE
PORTLAND OR 97203-5452

4a. Article Number: Z463 352 324

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 6-15-98

5. Received By: *(Print Name)* BARBARA L. BARNES

6. Signature: *(Addressee or Agent)* X Barbara L. Barnes

8. Addressee's Address *(Only if requested and fee is paid)*

Thank you for using Return Receipt Service.

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: **JUNE 15, 1998**

SAMPLING PERIOD: May, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| Fab 2 Pipe | Foxboro | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSION | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.5 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly onsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are ificant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas C. McCann Date: 6/12/98

S:\CUSTOMER\IU-W\WACKER\INSP-MON\98CONTPH.DOC

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 June 1998

SAMPLING PERIOD: May 1998

TODAY'S DATE: 10 June 1998

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | May 1998 | SAMPLE LOCATION> | OMW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB GRAB | DATE RECEIVED AT LAB > 7 May 1998 | | DATE OF SAMPLE ANAL. > | 12 May 1998 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organics 858 | | < 0.01 | 1.37 | -- | NO | DATE: 7 May 1998 |
| | | | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FOR WACKER SILTRONIC CORPORATION:

Signature: Thomas G. McCune Date: 6/12/98

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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | Cr | Sampled: 5/7/98 |
| 7200 N.W. Front | Project Number: | 98-59,60,61 | Received: 5/7/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/2/98 13:29 |

## Volatile Organic Compounds per EPA Method 8240B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 98-61 OWW | | | P805143-03 | | | | Water | |
| Acrolein | 0580232 | 5/11/98 | 5/12/98 | | 10.0 | ND | ug/l | |
| Acrylonitrile | " | " | " | | 5.00 | ND | " | |
| Benzene | " | " | " | | 2.00 | ND | " | |
| Bromodichloromethane | " | " | " | | 2.00 | ND | " | |
| Bromoform | " | " | " | | 2.00 | ND | " | |
| Bromomethane | " | " | " | | 5.00 | ND | " | |
| 2-Butanone | " | " | " | | 25.0 | ND | " | |
| Carbon disulfide | " | " | " | | 5.00 | ND | " | |
| Carbon tetrachloride | " | " | " | | 2.00 | ND | " | |
| Chlorobenzene | " | " | " | | 2.00 | ND | " | |
| Chloroethane | " | " | " | | 5.00 | ND | " | |
| **Chloroform** | " | " | " | | 2.00 | 3.10 | " | |
| Chloromethane | " | " | " | | 5.00 | ND | " | |
| Dibromochloromethane | " | " | " | | 2.00 | ND | " | |
| Dibromomethane | " | " | " | | 2.00 | ND | " | |
| 1,4-Dichloro-2-butene | " | " | " | | 5.00 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 2.00 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 2.00 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 2.00 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 5.00 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 2.00 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 2.00 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 2.00 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 2.00 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 2.00 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 2.00 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 2.00 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 2.00 | ND | " | |
| Ethyl Methacrylate | " | " | " | | 2.00 | ND | " | |
| Ethylbenzene | " | " | " | | 2.00 | ND | " | |
| 2-Hexanone | " | " | " | | 5.00 | ND | " | |
| Iodomethane | " | " | " | | 50.0 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 5.00 | ND | " | |
| Methylene chloride | " | " | " | | 5.00 | ND | " | |
| Styrene | " | " | " | | 2.00 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 2.00 | ND | " | |
| Tetrachloroethene | " | " | " | | 2.00 | ND | " | |
| Toluene | " | " | " | | 2.00 | ND | " | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

Mary A. Fritzmann Smith, Project Manager



SCOEPA00035453

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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | Cr | Sampled: 5/7/98 |
| 7200 N.W. Front | Project Number: | 98-59,60,61 | Received: 5/7/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/2/98 13:29 |

## Volatile Organic Compounds per EPA Method 8240B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **98-61 (continued)** | | | **P805143-03** | | | | **Water** | |
| 1,1,1-Trichloroethane | 0580232 | 5/11/98 | 5/12/98 | | 2.00 | ND | ug/l | |
| 1,1,2-Trichloroethane | " | " | " | | 2.00 | ND | " | |
| Trichloroethene | " | " | " | | 2.00 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 5.00 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 1.00 | ND | " | |
| Vinyl Acetate | " | " | " | | 10.0 | ND | " | |
| Vinyl chloride | " | " | " | | 2.00 | ND | " | |
| Xylenes (total) | " | " | " | | 2.00 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *75.0-130* | | *126* | % | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *75.0-130* | | *83.0* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *75.0-130* | | *91.5* | " | |
| **Acetone** | 0580569 | 5/21/98 | 5/21/98 | | 500 | **1780** | ug/l | 1 |
| *Surrogate: 4-BFB* | " | " | " | *75.0-130* | | *114* | % | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *75.0-130* | | *95.5* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *75.0-130* | | *92.5* | " | |



SCOEPA00035454

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PORTLAND • (503) 906-9200 • FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | Cr | Sampled: 5/7/98 |
| 7200 N.W. Front | Project Number: | 98-59,60,61 | Received: 5/7/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/2/98 13:29 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0580232** | **Date Prepared: 5/11/98** | | | | **Extraction Method: GC/MS Volatiles** | | | | | |
| **Blank** | **0580232-BLK1** | | | | | | | | | |
| Acetone | 5/11/98 | | | ND | ug/l | 25.0 | | | | |
| Acrolein | " | | | ND | " | 10.0 | | | | |
| Acrylonitrile | " | | | ND | " | 5.00 | | | | |
| Benzene | " | | | ND | " | 2.00 | | | | |
| Bromodichloromethane | " | | | ND | " | 2.00 | | | | |
| Bromoform | " | | | ND | " | 2.00 | | | | |
| Bromomethane | " | | | ND | " | 5.00 | | | | |
| 2-Butanone | " | | | ND | " | 25.0 | | | | |
| Carbon disulfide | " | | | ND | " | 5.00 | | | | |
| Carbon tetrachloride | " | | | ND | " | 2.00 | | | | |
| Chlorobenzene | " | | | ND | " | 2.00 | | | | |
| Chloroethane | " | | | ND | " | 5.00 | | | | |
| Chloroform | " | | | ND | " | 2.00 | | | | |
| Chloromethane | " | | | ND | " | 5.00 | | | | |
| Dibromochloromethane | " | | | ND | " | 2.00 | | | | |
| Dibromomethane | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichloro-2-butene | " | | | ND | " | 5.00 | | | | |
| 1,2-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| Dichlorodifluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,1-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| cis-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| trans-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloropropane | " | | | ND | " | 2.00 | | | | |
| cis-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| trans-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| Ethyl Methacrylate | " | | | ND | " | 2.00 | | | | |
| Ethylbenzene | " | | | ND | " | 2.00 | | | | |
| 2-Hexanone | " | | | ND | " | 5.00 | | | | |
| Iodomethane | " | | | ND | " | 50.0 | | | | |
| 4-Methyl-2-pentanone | " | | | ND | " | 5.00 | | | | |
| Methylene chloride | " | | | ND | " | 5.00 | | | | |
| Styrene | " | | | ND | " | 2.00 | | | | |
| 1,1,2,2-Tetrachloroethane | " | | | ND | " | 2.00 | | | | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager



SCOEPA00035455

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE • (509) 924-9200 • FAX 924-9290
PORTLAND • (503) 906-9200 • FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | Cr | Sampled: 5/7/98 |
| 7200 N.W. Front | Project Number: | 98-59,60,61 | Received: 5/7/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/2/98 13:29 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **0580232-BLK1** | | | | | | | | | |
| Tetrachloroethene | 5/11/98 | | | ND | ug/l | 2.00 | | | | |
| Toluene | " | | | ND | " | 2.00 | | | | |
| 1,1,1-Trichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1,2-Trichloroethane | " | | | ND | " | 2.00 | | | | |
| Trichloroethene | " | | | ND | " | 2.00 | | | | |
| Trichlorofluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,2,3-Trichloropropane | " | | | ND | " | 1.00 | | | | |
| Vinyl Acetate | " | | | ND | " | 10.0 | | | | |
| Vinyl chloride | " | | | ND | " | 2.00 | | | | |
| Xylenes (total) | " | | | ND | " | 2.00 | | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *23.4* | " | *75.0-130* | *117* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *17.5* | " | *75.0-130* | *87.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *18.5* | " | *75.0-130* | *92.5* | | | |
| **LCS** | **0580232-BS1** | | | | | | | | | |
| Benzene | 5/11/98 | 20.0 | | 20.0 | ug/l | 76.0-127 | 100 | | | |
| Chlorobenzene | " | 20.0 | | 19.3 | " | 75.0-130 | 96.5 | | | |
| 1,1-Dichloroethene | " | 20.0 | | 17.8 | " | 61.0-145 | 89.0 | | | |
| Toluene | " | 20.0 | | 19.1 | " | 76.0-125 | 95.5 | | | |
| Trichloroethene | " | 20.0 | | 20.5 | " | 71.0-120 | 103 | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *23.0* | " | *75.0-130* | *115* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *17.6* | " | *75.0-130* | *88.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *18.6* | " | *75.0-130* | *93.0* | | | |
| **LCS Dup** | **0580232-BSD1** | | | | | | | | | |
| Benzene | 5/11/98 | 20.0 | | 19.0 | ug/l | 76.0-127 | 95.0 | 11.0 | 5.13 | |
| Chlorobenzene | " | 20.0 | | 18.8 | " | 75.0-130 | 94.0 | 13.0 | 2.62 | |
| 1,1-Dichloroethene | " | 20.0 | | 16.8 | " | 61.0-145 | 84.0 | 14.0 | 5.78 | |
| Toluene | " | 20.0 | | 18.7 | " | 76.0-125 | 93.5 | 13.0 | 2.12 | |
| Trichloroethene | " | 20.0 | | 20.0 | " | 71.0-120 | 100 | 14.0 | 2.96 | |
| *Surrogate: 4-BFB* | " | *20.0* | | *23.6* | " | *75.0-130* | *118* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *16.8* | " | *75.0-130* | *84.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *18.9* | " | *75.0-130* | *94.5* | | | |
| **Batch: 0580569** | **Date Prepared: 5/21/98** | | | | | **Extraction Method: GC/MS Volatiles** | | | | |
| **Blank** | **0580569-BLK1** | | | | | | | | | |
| Acetone | 5/21/98 | | | ND | ug/l | 25.0 | | | | |
| Acrolein | " | | | ND | " | 10.0 | | | | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

Mary A. Fritzmann Smith, Project Manager



SCOEPA00035456

May 8, 1998 ER065:TM

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the April, 1998 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Return to: Petra Mattes MS 30

Z 463 352 322

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to TIM DEAN BES | |
| Street & Number 6543 N Burlington Ave | |
| Post Office, State, & ZIP Code Portland OR 97203 | |
| Postage | $ .78 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 3.23 |
| Postmark or Date | MAY 13 1998 |

PS Form **3800**, April 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BES
6543 N Burlington Ave
Portland, OR 97203-5452

4a. Article Number: Z463 352 322

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 5/14/98

5. Received By: *(Print Name)* GAIL BARNES

6. Signature: *(Addressee or Agent)* X Gail K Barnes

8. Addressee's Address *(Only if requested and fee is paid)*

Thank you for using Return Receipt Service.

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

NDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: **MAY 15, 1998**

SAMPLING PERIOD: April, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By:**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| Fab 2 Pipe | Foxboro | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.5 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: Thomas A. Wilson Date: 5/12/98

S:\CUSTOMER\IU-W\WACKER\INSP-MON\98CONTPH.DOC

SCOEPA00035459

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

DUSTRY NAME: Wacker Siltronic Corporation

RMIT NUMBER: 469-001

POR. E DATE: May 15, 1998

MPLING PERIOD: April 1998

DAY'S DATE: May 7, 1998

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | April 4, 98 | SAMPLE LOCATION> | FAB 2 PIPE | SAMPLE TYPE > | XX COMPOSITE __ GRAB GRAB | DATE RECEIVED AT LAB > April 9, 98 | | DATE OF SAMPLE ANAL. > | April 17, 1998 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| TTO | 858 | <0.05 | 1.37 | -- | NO | DATE: April 9, 1998 |
| | | | | | | DATE: |
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rtify under penalty of law that this document and all attachments were prepared under my direction or supervision ccordance with a system designed to ensure that qualified personnel properly gather and evaluate the information itted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, complete. I am aware that there are significant penalties for submitting false information, including the ibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

ature: Thomas C. McCue

Date: 5/12/98

-1A.fil
24/94

SCOEPA00035460

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-50,51,52 | Sampled: 4/9/98 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 4/9/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 5/1/98 08:49 |

**Volatile Organic Compounds per EPA Method 8240B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 98-52 OWW, grab | | | P804194-04 | | | | Water | 2 |
| **Acetone** | 0480386 | 4/17/98 | 4/17/98 | | 125 | 923 | ug/l | |
| Acrolein | " | " | " | | 50.0 | ND | " | |
| Acrylonitrile | " | " | " | | 25.0 | ND | " | |
| Benzene | " | " | " | | 10.0 | ND | " | |
| Bromodichloromethane | " | " | " | | 10.0 | ND | " | |
| Bromoform | " | " | " | | 10.0 | ND | " | |
| Bromomethane | " | " | " | | 25.0 | ND | " | |
| 2-Butanone | " | " | " | | 125 | ND | " | |
| Carbon disulfide | " | " | " | | 25.0 | ND | " | |
| Carbon tetrachloride | " | " | " | | 10.0 | ND | " | |
| Chlorobenzene | " | " | " | | 10.0 | ND | " | |
| Chloroethane | " | " | " | | 25.0 | ND | " | |
| Chloroform | " | " | " | | 10.0 | ND | " | |
| Chloromethane | " | " | " | | 25.0 | ND | " | |
| `ibromochloromethane | " | " | " | | 10.0 | ND | " | |
| .bromomethane | " | " | " | | 10.0 | ND | " | |
| 1,4-Dichloro-2-butene | " | " | " | | 25.0 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 25.0 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 10.0 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 10.0 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 10.0 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 10.0 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 10.0 | ND | " | |
| Ethyl Methacrylate | " | " | " | | 10.0 | ND | " | |
| Ethylbenzene | " | " | " | | 10.0 | ND | " | |
| 2-Hexanone | " | " | " | | 25.0 | ND | " | |
| Iodomethane | " | " | " | | 250 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 25.0 | ND | " | |
| Methylene chloride | " | " | " | | 25.0 | ND | " | |
| Styrene | " | " | " | | 10.0 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 10.0 | ND | " | |
| Tetrachloroethene | " | " | " | | 10.0 | ND | " | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

MAS

Mary A. Fritzmann Smith, Project Manager

18939 120th Avenue N.E. Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue Beaverton, OR 97008-7132



SCOEPA00035461

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-50,51,52 | Sampled: 4/9/98 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 4/9/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 5/1/98 08:49 |

**Volatile Organic Compounds per EPA Method 8240B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 98-52 (continued) | | | P804194-04 | | | | Water | 2 |
| Toluene | 0480386 | 4/17/98 | 4/17/98 | | 10.0 | ND | ug/l | |
| 1,1,1-Trichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 10.0 | ND | " | |
| Trichloroethene | " | " | " | | 10.0 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 25.0 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 5.00 | ND | " | |
| Vinyl Acetate | " | " | " | | 50.0 | ND | " | |
| Vinyl chloride | " | " | " | | 10.0 | ND | " | |
| Xylenes (total) | " | " | " | | 10.0 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *75.0-130* | | *104* | % | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *75.0-130* | | *94.0* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *75.0-130* | | *101* | " | |



SCOEPA00035462

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-50,51,52 | Sampled: 4/9/98 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 4/9/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 5/1/98 08:49 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0480334** | **Date Prepared: 4/15/98** | | | | | **Extraction Method: GC/MS Volatiles** | | | | |
| **Blank** | **0480334-BLK1** | | | | | | | | | |
| Acetone | 4/15/98 | | | ND | ug/l | 25.0 | | | | |
| Acrolein | " | | | ND | " | 10.0 | | | | |
| Acrylonitrile | " | | | ND | " | 5.00 | | | | |
| Benzene | " | | | ND | " | 2.00 | | | | |
| Bromodichloromethane | " | | | ND | " | 2.00 | | | | |
| Bromoform | " | | | ND | " | 2.00 | | | | |
| Bromomethane | " | | | ND | " | 5.00 | | | | |
| 2-Butanone | " | | | ND | " | 25.0 | | | | |
| Carbon disulfide | " | | | ND | " | 5.00 | | | | |
| Carbon tetrachloride | " | | | ND | " | 2.00 | | | | |
| Chlorobenzene | " | | | ND | " | 2.00 | | | | |
| Chloroethane | " | | | ND | " | 5.00 | | | | |
| Chloroform | " | | | ND | " | 2.00 | | | | |
| Chloromethane | " | | | ND | " | 5.00 | | | | |
| Dibromochloromethane | " | | | ND | " | 2.00 | | | | |
| Dibromomethane | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichloro-2-butene | " | | | ND | " | 5.00 | | | | |
| 1,2-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| Dichlorodifluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,1-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| cis-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| trans-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloropropane | " | | | ND | " | 2.00 | | | | |
| cis-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| trans-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| Ethyl Methacrylate | " | | | ND | " | 2.00 | | | | |
| Ethylbenzene | " | | | ND | " | 2.00 | | | | |
| 2-Hexanone | " | | | ND | " | 5.00 | | | | |
| Iodomethane | " | | | ND | " | 50.0 | | | | |
| 4-Methyl-2-pentanone | " | | | ND | " | 5.00 | | | | |
| Methylene chloride | " | | | ND | " | 5.00 | | | | |
| Styrene | " | | | ND | " | 2.00 | | | | |
| 1,1,2,2-Tetrachloroethane | " | | | ND | " | 2.00 | | | | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager



SCOEPA00035463

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE • (509) 924-9200 • FAX 924-9290
PORTLAND • (503) 906-9200 • FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-50,51,52 | Sampled: 4/9/98 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 4/9/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 5/1/98 08:49 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **0480334-BLK1** | | | | | | | | | |
| Tetrachloroethene | 4/15/98 | | | ND | ug/l | 2.00 | | | | |
| Toluene | " | | | ND | " | 2.00 | | | | |
| 1,1,1-Trichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1,2-Trichloroethane | " | | | ND | " | 2.00 | | | | |
| Trichloroethene | " | | | ND | " | 2.00 | | | | |
| Trichlorofluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,2,3-Trichloropropane | " | | | ND | " | 1.00 | | | | |
| Vinyl Acetate | " | | | ND | " | 10.0 | | | | |
| Vinyl chloride | " | | | ND | " | 2.00 | | | | |
| Xylenes (total) | " | | | ND | " | 2.00 | | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *20.9* | " | *75.0-130* | *104* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *18.6* | " | *75.0-130* | *93.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.0* | " | *75.0-130* | *100* | | | |
| **CS** | **0480334-BS1** | | | | | | | | | |
| enzene | 4/15/98 | 20.0 | | 19.6 | ug/l | 76.0-127 | 98.0 | | | |
| Chlorobenzene | " | 20.0 | | 20.3 | " | 75.0-130 | 101 | | | |
| 1,1-Dichloroethene | " | 20.0 | | 18.6 | " | 61.0-145 | 93.0 | | | |
| Toluene | " | 20.0 | | 20.5 | " | 76.0-125 | 103 | | | |
| Trichloroethene | " | 20.0 | | 18.6 | " | 71.0-120 | 93.0 | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *21.7* | " | *75.0-130* | *109* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *18.2* | " | *75.0-130* | *91.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.4* | " | *75.0-130* | *102* | | | |
| **LCS Dup** | **0480334-BSD1** | | | | | | | | | |
| Benzene | 4/15/98 | 20.0 | | 20.3 | ug/l | 76.0-127 | 101 | 11.0 | 3.02 | |
| Chlorobenzene | " | 20.0 | | 20.4 | " | 75.0-130 | 102 | 13.0 | 0.985 | |
| 1,1-Dichloroethene | " | 20.0 | | 18.9 | " | 61.0-145 | 94.5 | 14.0 | 1.60 | |
| Toluene | " | 20.0 | | 20.5 | " | 76.0-125 | 103 | 13.0 | 0 | |
| Trichloroethene | " | 20.0 | | 19.1 | " | 71.0-120 | 95.5 | 14.0 | 2.65 | |
| *Surrogate: 4-BFB* | " | *20.0* | | *21.8* | " | *75.0-130* | *109* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *18.8* | " | *75.0-130* | *94.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.2* | " | *75.0-130* | *101* | | | |
| **Batch: 0480386** | **Date Prepared: 4/17/98** | | | | | **Extraction Method: GC/MS Volatiles** | | | | |
| **Blank** | **0480386-BLK1** | | | | | | | | | |
| Acetone | 4/17/98 | | | ND | ug/l | 25.0 | | | | |
| Acrolein | " | | | ND | " | 10.0 | | | | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035464

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-50,51,52 | Sampled: 4/9/98 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 4/9/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 5/1/98 08:49 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | 0480386-BLK1 | | | | | | | | | |
| Acrylonitrile | 4/17/98 | | | ND | ug/l | 5.00 | | | | |
| Benzene | " | | | ND | " | 2.00 | | | | |
| Bromodichloromethane | " | | | ND | " | 2.00 | | | | |
| Bromoform | " | | | ND | " | 2.00 | | | | |
| Bromomethane | " | | | ND | " | 5.00 | | | | |
| 2-Butanone | " | | | ND | " | 25.0 | | | | |
| Carbon disulfide | " | | | ND | " | 5.00 | | | | |
| Carbon tetrachloride | " | | | ND | " | 2.00 | | | | |
| Chlorobenzene | " | | | ND | " | 2.00 | | | | |
| Chloroethane | " | | | ND | " | 5.00 | | | | |
| Chloroform | " | | | ND | " | 2.00 | | | | |
| Chloromethane | " | | | ND | " | 5.00 | | | | |
| Dibromochloromethane | " | | | ND | " | 2.00 | | | | |
| Dibromomethane | " | | | ND | " | 2.00 | | | | |
| 4-Dichloro-2-butene | " | | | ND | " | 5.00 | | | | |
| 2-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| Dichlorodifluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,1-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| cis-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| trans-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloropropane | " | | | ND | " | 2.00 | | | | |
| cis-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| trans-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| Ethyl Methacrylate | " | | | ND | " | 2.00 | | | | |
| Ethylbenzene | " | | | ND | " | 2.00 | | | | |
| 2-Hexanone | " | | | ND | " | 5.00 | | | | |
| Iodomethane | " | | | ND | " | 50.0 | | | | |
| 4-Methyl-2-pentanone | " | | | ND | " | 5.00 | | | | |
| Methylene chloride | " | | | ND | " | 5.00 | | | | |
| Styrene | " | | | ND | " | 2.00 | | | | |
| 1,1,2,2-Tetrachloroethane | " | | | ND | " | 2.00 | | | | |
| Tetrachloroethene | " | | | ND | " | 2.00 | | | | |
| Toluene | " | | | ND | " | 2.00 | | | | |
| 1,1,1-Trichloroethane | " | | | ND | " | 2.00 | | | | |



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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-50,51,52 | Sampled: 4/9/98 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 4/9/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 5/1/98 08:49 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **0480386-BLK1** | | | | | | | | | |
| 1,1,2-Trichloroethane | 4/17/98 | | | ND | ug/l | 2.00 | | | | |
| Trichloroethene | " | | | ND | " | 2.00 | | | | |
| Trichlorofluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,2,3-Trichloropropane | " | | | ND | " | 1.00 | | | | |
| Vinyl Acetate | " | | | ND | " | 10.0 | | | | |
| Vinyl chloride | " | | | ND | " | 2.00 | | | | |
| Xylenes (total) | " | | | ND | " | 2.00 | | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *18.9* | " | *75.0-130* | *94.5* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *20.6* | " | *75.0-130* | *103* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *18.5* | " | *75.0-130* | *92.5* | | | |
| **LCS** | **0480386-BS1** | | | | | | | | | |
| Benzene | 4/17/98 | 20.0 | | 20.7 | ug/l | 76.0-127 | 104 | | | |
| Chlorobenzene | " | 20.0 | | 20.1 | " | 75.0-130 | 101 | | | |
| 1,1-Dichloroethene | " | 20.0 | | 19.3 | " | 61.0-145 | 96.5 | | | |
| Toluene | " | 20.0 | | 20.6 | " | 76.0-125 | 103 | | | |
| Trichloroethene | " | 20.0 | | 18.0 | " | 71.0-120 | 90.0 | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *20.8* | " | *75.0-130* | *104* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.1* | " | *75.0-130* | *95.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.7* | " | *75.0-130* | *104* | | | |
| **LCS Dup** | **0480386-BSD1** | | | | | | | | | |
| Benzene | 4/17/98 | 20.0 | | 20.7 | ug/l | 76.0-127 | 104 | 11.0 | 0 | |
| Chlorobenzene | " | 20.0 | | 20.2 | " | 75.0-130 | 101 | 13.0 | 0 | |
| 1,1-Dichloroethene | " | 20.0 | | 19.2 | " | 61.0-145 | 96.0 | 14.0 | 0.519 | |
| Toluene | " | 20.0 | | 20.8 | " | 76.0-125 | 104 | 13.0 | 0.966 | |
| Trichloroethene | " | 20.0 | | 18.3 | " | 71.0-120 | 91.5 | 14.0 | 1.65 | |
| *Surrogate: 4-BFB* | " | *20.0* | | *21.2* | " | *75.0-130* | *106* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.1* | " | *75.0-130* | *95.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.7* | " | *75.0-130* | *104* | | | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

MAS
Mary A. Fritzmann Smith, Project Manager

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9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



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Environmental Laboratory Services

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|---|---|---|---|
| Wacker Siltronics Corporation | Project: | 98-50,51,52 | Sampled: 4/9/98 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 4/9/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 5/1/98 08:49 |

**Notes and Definitions**

| # | Note |
|---|---|
| 1 | Estimated concentration. Result may be biased high due to high calibration curve for this analyte. |
| 2 | Reporting limits raised due to dilution necessary for analysis. |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| Recov. | Recovery |
| RPD | Relative Percent Difference |

North Creek Analytical, Inc.

Mary A. Fritzmann Smith, Project Manager

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East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035467

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) [illegible]00 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) [illegible]200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

**Work Order #**

REPORT TO: Wacker Siltronic
ATTENTION: Tom Rothe Hill
ADDRESS: [illegible] N.W. Front Ave
Portland, OR
PHONE: 214-7274 FAX: 417-4144
PROJECT NAME:
PROJECT NUMBER:
SAMPLED BY: Dianne Mullan

INVOICE TO: Wacker Siltronic
ATTENTION: Accts Payable
ADDRESS: Same
P.O. NUMBER: 405748 NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: X 10 (Standard) | 7 | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: 5 (Standard) | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

Analysis Request:

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Flash Point | Solvent Scan | CrT | TTO-8240 | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 98 45 | 4/3/98 1340 | | X | X | | | Solvent | 1 | |
| 2. | 98 50 | 4/9/98 0720 | | | | X | | W | 1 | HNO3 |
| 3. | 98 51 | ↓ | | | | | X | W | 2 | HCL |
| 4. | 98 52 | ↓ | | | | | X | W | 2 | HCL |
| 5. | | | | | | | | | | |
| 6. | | | | | | | | | | |
| 7. | | | | | | | | | | |
| 8. | | | | | | | | | | |
| 9. | | | | | | | | | | |
| 10. | | | | | | | | | | |

RELINQUISHED BY (Signature): Dianne Mullan DATE: 4/9/98
PRINT NAME: [illegible] FIRM: Wacker TIME: 0830
RELINQUISHED BY (Signature): DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY (Signature): [signature] DATE: 4-9-98
PRINT NAME: Gary Spengler FIRM: NCA TIME: 0830
RECEIVED BY (Signature): DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS: #1) Please report ing ppm as well as Percent.
#2) Please use detect limit of 0.001 ppm

PAGE 1 OF 1

COC Rev 8, 1/96

SCOEPA00035468

**Wacker Siltronic Corporation**
ER061:TM

April 9, 1998

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the March, 1998 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Also included are results of the March 5, 1998 sample split with the City of Portland.

Per our telephone conversation, I have included a summary of the incident that occurred on March 4, 1998.

- A Fab 1 shared flow valve, which controls the flow of the OWW forwarding sump to the wastewater treatment plant, was inadvertently closed. This prevented wastewater from Fab 1 to reach the wastewater treatment plant.
- The closed valve resulted in a high level alarm in the forwarding sump and an overflow to the sanitary sewer.
- High level conditions at the forwarding sump were immediately detected by the operator and investigated. A high-level overflow condition was found and corrected. In addition a sample was taken at the OWW forwarding sump, with a pH of 9.1. The daily pH limit is 5.5 – 11.5 SU.
  The time of the incident was 15:15 – 15:45 (approximately 20 minutes). Estimated peak flow: 200 GPM, conservative total of 4,000 gallons.
- A telephone call was made to the Columbia Boulevard WWTP spill report Duty Officer.
- Facilities Operations has educated operators about this incident to help prevent future occurrences.

Wacker Siltronic is currently in compliance with the Permit for this reporting period.
If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report
cc: Tom Rothschild
POTW-IDR File

PLEASE RETURN TO PETRA MATTES MS 30

Z 463 352 319

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to<br>TIM DEAN, BES | |
| Street & Number<br>6543 N Burlington Avenue | |
| Post Office, State, & ZIP Code<br>Portland, OR 97203-5452 | |
| Postage | $ .78 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| **TOTAL** Postage & Fees | 3.23 |
| Postmark or Date | PORTLAND OR SAINT JOHNS STA APR 10 1998 |

PS Form **3800**, April 1995

Is your **RETURN ADDRESS** completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUREAU OF ENVIRONMENTAL SERVICES
6543 N Burlington Avenue
Portland, OR 97203-5452

4a. Article Number

Z463 352 319

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery 4-15-98

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*

X

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

IN TRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: **APRIL 15, 1998**

SAMPLING PERIOD: March, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By:**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| FAB 2 PIPE | FOXBORO | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.5 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are signi[illegible]nt penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Thomas C. McCune Date: 4/8/98

S:\CUSTOMER\IU-W\WACKER\INSP-MON\98CONTPH.DOC

SCOEPA00035471

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

DUSTRY NAME: Wacker Siltronic Corporation

RMIT NUMBER: 469-001

POI E DATE: April 15, 1998

MPLING PERIOD: March, 1998 Split Sample (City)

DAY'S DATE: April 9, 1998

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | March 3-4, 1998 | SAMPLE LOCATION> | OMW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | March 5 | DATE OF SAMPLE ANAL. > | March 14 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| ARSENIC (TOTAL) | 710 | < 0.001 | 0.3 | | NO | DATE: City Split Sample |
| CADMIUM (TOTAL) | 736 | < 0.001 | 0.7 | | NO | DATE: |
| COPPER (TOTAL) | 752 | 0.031 | 2.3 | | NO | DATE: |
| CHROMIUM (TOTAL) | 748 | 0.018 | 3.8 | | NO | DATE: |
| LEAD (TOTAL) | 811 | 0.002 | 0.7 | | NO | DATE: |
| NICKEL (TOTAL) | 824 | 0.008 | 3.0 | | NO | DATE: |
| MERCURY (TOTAL) | 813 | < 0.0005 | 0.014 | | NO | DATE: |
| ZINC (TOTAL) | 874 | 0.170 | 4.0 | | NO | DATE: |
| | | | | | | DATE: |
| TTO | 858 | < 0.02 | 1.37 | | NO | DATE: GRAB |
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rtify under penalty of law that this document and all attachments were prepared under my direction or supervision ccordance with a system designed to ensure that qualified personnel properly gather and evaluate the information itted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, complete. I am aware that there are significant penalties for submitting false information, including the ibility of fine and imprisonment for knowing violations.

ature: Thomas C. McCue Date: 4/8/98

-1A.fil
24/94

SCOEPA00035472

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 3/3/98 to 3/5/98 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 3/5/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/2/98 15:19 |

**Total Metals per EPA 6000/7000 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **98-38** cww 2nd stage 3/4 | | | **P803103-03** | | | | **Water** | |
| Arsenic | 0380363 | 3/13/98 | 3/14/98 | EPA 6020 | 0.00100 | ND | mg/l | |
| Cadmium | " | " | 3/16/98 | EPA 6020 | 0.00100 | ND | " | |
| **Chromium** | " | " | 3/14/98 | EPA 6020 | 0.00100 | **0.0178** | " | |
| **Lead** | " | " | " | EPA 6020 | 0.00100 | **0.00180** | " | |
| **Nickel** | " | " | " | EPA 6020 | 0.00200 | **0.00830** | " | |
| Silver | " | " | " | EPA 6020 | 0.00100 | ND | " | |
| **Zinc** | " | " | " | EPA 6020 | 0.00500 | **0.170** | " | |
| Mercury | 0380182 | 3/5/98 | 3/6/98 | EPA 7470A | 0.000500 | ND | " | |
| **Copper** | 0380523 | 3/19/98 | 3/20/98 | EPA 6020 | 0.00200 | **0.0311** | " | |
| **98-39** CE composite 3/5 | | | **P803103-04** | | | | **Water** | |
| **Chromium** | 0380433 | 3/17/98 | 3/18/98 | EPA 6020 | 0.00100 | **0.00190** | mg/l | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

DRAFT

ary A. Fritzmann Smith, Project Manager



SCOEPA00035473

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 3/3/98 to 3/5/98 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 3/5/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/2/98 15:19 |

## Volatile Organic Compounds per EPA Method 8240B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 98-36 | | | P803103-01 | | | | Water | 3 |
| **Acetone** | 0380339 | 3/13/98 | 3/14/98 | | 50.0 | 248 | ug/l | 4 |
| Acrolein | " | " | " | | 100 | ND | " | |
| Acrylonitrile | " | " | " | | 20.0 | ND | " | |
| Benzene | " | " | " | | 4.00 | ND | " | |
| Bromodichloromethane | " | " | " | | 4.00 | ND | " | |
| Bromoform | " | " | " | | 4.00 | ND | " | |
| Bromomethane | " | " | " | | 20.0 | ND | " | |
| 2-Butanone | " | " | " | | 50.0 | ND | " | |
| Carbon disulfide | " | " | " | | 10.0 | ND | " | |
| Carbon tetrachloride | " | " | " | | 4.00 | ND | " | |
| Chlorobenzene | " | " | " | | 4.00 | ND | " | |
| Chloroethane | " | " | " | | 20.0 | ND | " | |
| Chloroform | " | " | " | | 4.00 | ND | " | |
| Chloromethane | " | " | " | | 20.0 | ND | " | |
| Dibromochloromethane | " | " | " | | 4.00 | ND | " | |
| Dibromomethane | " | " | " | | 4.00 | ND | " | |
| 1,4-Dichloro-2-butene | " | " | " | | 4.00 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 4.00 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 4.00 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 4.00 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 20.0 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 4.00 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 4.00 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 4.00 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 4.00 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 4.00 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 4.00 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 4.00 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 4.00 | ND | " | |
| Ethyl Methacrylate | " | " | " | | 4.00 | ND | " | |
| Ethylbenzene | " | " | " | | 4.00 | ND | " | |
| 2-Hexanone | " | " | " | | 10.0 | ND | " | |
| Iodomethane | " | " | " | | 20.0 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 10.0 | ND | " | |
| Methylene chloride | " | " | " | | 10.0 | ND | " | |
| Styrene | " | " | " | | 4.00 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 4.00 | ND | " | |
| Tetrachloroethene | " | " | " | | 4.00 | ND | " | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

[illegible]

Mary A. Fritzmann Smith, Project Manager



SCOEPA00035474

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 3/3/98 to 3/5/98 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 3/5/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/2/98 15:19 |

**Volatile Organic Compounds per EPA Method 8240B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **98-36 (continued)** | | | **P803103-01** | | | | **Water** | **3** |
| Toluene | 0380339 | 3/13/98 | 3/14/98 | | 4.00 | ND | ug/l | |
| 1,1,1-Trichloroethane | " | " | " | | 4.00 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 4.00 | ND | " | |
| Trichloroethene | " | " | " | | 4.00 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 20.0 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 10.0 | ND | " | |
| Vinyl Acetate | " | " | " | | 10.0 | ND | " | |
| Vinyl chloride | " | " | " | | 20.0 | ND | " | |
| Xylenes (total) | " | " | " | | 4.00 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *75.0-130* | | *101* | % | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *75.0-130* | | *101* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *75.0-130* | | *102* | " | |



SCOEPA00035475

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PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 3/3/98 to 3/5/98 |
| 7200 N.W. Front | Project Number: | 98-36 | Received: 3/5/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/8/98 10:12 |

## Total Metals per EPA 6000/7000 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0380182** | **Date Prepared: 3/5/98** | | | | | **Extraction Method: EPA 7470** | | | | |
| **Blank** | **0380182-BLK1** | | | | | | | | | |
| Mercury | 3/6/98 | | | **ND** | mg/l | **0.000500** | | | | |
| **LCS** | **0380182-BS1** | | | | | | | | | |
| Mercury | 3/6/98 | 0.00500 | | 0.00430 | mg/l | 80.0-120 | 86.0 | | | |
| **Duplicate** | **0380182-DUP1** | | **P803099-01** | | | | | | | |
| Mercury | 3/6/98 | | ND | ND | mg/l | | | 20.0 | | |
| **Matrix Spike** | **0380182-MS1** | | **P803099-01** | | | | | | | |
| Mercury | 3/6/98 | 0.00500 | ND | 0.00520 | mg/l | 75.0-125 | **104** | | | |
| **Batch: 0380363** | **Date Prepared: 3/13/98** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **nk** | **0380363-BLK1** | | | | | | | | | |
| Arsenic | 3/14/98 | | | **ND** | mg/l | **0.00100** | | | | |
| Cadmium | " | | | **ND** | " | **0.00100** | | | | |
| Chromium | " | | | **ND** | " | **0.00100** | | | | |
| Lead | " | | | **ND** | " | **0.00100** | | | | |
| Nickel | " | | | **ND** | " | **0.00200** | | | | |
| Silver | " | | | **ND** | " | **0.00100** | | | | |
| Zinc | " | | | **ND** | " | **0.00500** | | | | |
| **LCS** | **0380363-BS1** | | | | | | | | | |
| Arsenic | 3/16/98 | 0.100 | | 0.104 | mg/l | 80.0-120 | 104 | | | |
| Cadmium | " | 0.100 | | 0.107 | " | 80.0-120 | 107 | | | |
| Chromium | 3/14/98 | 0.100 | | 0.0970 | " | 80.0-120 | 97.0 | | | |
| Lead | " | 0.100 | | 0.0940 | " | 80.0-120 | 94.0 | | | |
| Nickel | " | 0.100 | | 0.0981 | " | 80.0-120 | 98.1 | | | |
| Silver | " | 0.100 | | 0.0992 | " | 80.0-120 | 99.2 | | | |
| Zinc | 3/16/98 | 0.100 | | 0.110 | " | 80.0-120 | 110 | | | |
| **Duplicate** | **0380363-DUP1** | | **P803237-01** | | | | | | | |
| Arsenic | 3/14/98 | | 0.00180 | 0.00220 | mg/l | | | 20.0 | **20.0** | |
| Cadmium | " | | ND | ND | " | | | 20.0 | | |
| Chromium | " | | ND | ND | " | | | 20.0 | | |



SCOEPA00035476

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PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: N/A | Sampled: | 3/3/98 to 3/5/98 |
| 7200 N.W. Front | Project Number: 98-36 | Received: | 3/5/98 |
| Portland, OR 97210 | Project Manager: Thomas Rothschild | Reported: | 4/8/98 10:12 |

## Total Metals per EPA 6000/7000 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate (continued)** | **0380363-DUP1** | | **P803237-01** | | | | | | | |
| Lead | 3/14/98 | | 0.0399 | 0.0406 | mg/l | | | 20.0 | **1.74** | |
| Nickel | " | | 0.0118 | 0.0113 | " | | | 20.0 | **4.33** | |
| Silver | " | | ND | ND | " | | | 20.0 | | |
| Zinc | " | | 0.102 | 0.118 | " | | | 20.0 | **14.5** | |
| **Matrix Spike** | **0380363-MS1** | | **P803237-01** | | | | | | | |
| Arsenic | 3/14/98 | 0.100 | 0.00180 | 0.116 | mg/l | 75.0-125 | **114** | | | |
| Cadmium | " | 0.100 | ND | 0.109 | " | 75.0-125 | **109** | | | |
| Chromium | " | 0.100 | ND | 0.105 | " | 75.0-125 | **105** | | | |
| Lead | " | 0.100 | 0.0399 | 0.126 | " | 75.0-125 | **86.1** | | | |
| Nickel | " | 0.100 | 0.0118 | 0.111 | " | 75.0-125 | **99.2** | | | |
| Silver | " | 0.100 | ND | 0.0682 | " | 75.0-125 | **68.2** | | | 5 |
| Zinc | " | 0.100 | 0.102 | 0.213 | " | 75.0-125 | **111** | | | |
| **Matrix Spike** | **0380363-MS2** | | **P803123-02** | | | | | | | |
| Arsenic | 3/14/98 | 0.100 | ND | 0.109 | mg/l | 75.0-125 | **109** | | | |
| Cadmium | " | 0.100 | 0.00360 | 0.110 | " | 75.0-125 | **106** | | | |
| Chromium | " | 0.100 | 0.00460 | 0.108 | " | 75.0-125 | **103** | | | |
| Lead | " | 0.100 | 0.00560 | 0.0925 | " | 75.0-125 | **86.9** | | | |
| Nickel | " | 0.100 | 0.00720 | 0.107 | " | 75.0-125 | **99.8** | | | |
| Silver | " | 0.100 | 0.00590 | 0.0946 | " | 75.0-125 | **88.7** | | | |
| Zinc | " | 0.100 | 0.0884 | 0.208 | " | 75.0-125 | **120** | | | |
| **Batch: 0380433** | **Date Prepared: 3/17/98** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **0380433-BLK1** | | | | | | | | | |
| Chromium | 3/17/98 | | | **ND** | mg/l | **0.00100** | | | | |
| **LCS** | **0380433-BS1** | | | | | | | | | |
| Chromium | 3/17/98 | 0.100 | | 0.0998 | mg/l | 80.0-120 | 99.8 | | | |
| **Duplicate** | **0380433-DUP1** | | **P803103-04** | | | | | | | |
| Chromium | 3/18/98 | | 0.00190 | 0.00200 | mg/l | | | 20.0 | **5.13** | |
| **Matrix Spike** | **0380433-MS1** | | **P803103-04** | | | | | | | |
| Chromium | 3/18/98 | 0.100 | 0.00190 | 0.107 | mg/l | 75.0-125 | **105** | | | |



SCOEPA00035477

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 3/3/98 to 3/5/98 |
| 7200 N.W. Front | Project Number: | 98-36 | Received: 3/5/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/8/98 10:12 |

## Total Metals per EPA 6000/7000 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Matrix Spike** | **0380433-MS2** | | **P803243-01** | | | | | | | |
| Chromium | 3/18/98 | 0.100 | 0.00170 | 0.108 | mg/l | 75.0-125 | **106** | | | |
| **Batch: 0380523** | **Date Prepared: 3/19/98** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **0380523-BLK1** | | | | | | | | | |
| Copper | 3/20/98 | | | **ND** | mg/l | **0.00200** | | | | |
| **LCS** | **0380523-BS1** | | | | | | | | | |
| Copper | 3/20/98 | 0.200 | | 0.193 | mg/l | 80.0-120 | 96.5 | | | |
| **Duplicate** | **0380523-DUP1** | | **P803237-01** | | | | | | | |
| Copper | 3/20/98 | | 0.0104 | 0.0102 | mg/l | | | 20.0 | **1.94** | |
| **Matrix Spike** | **0380523-MS1** | | **P803237-01** | | | | | | | |
| Copper | 3/20/98 | 0.200 | 0.0104 | 0.203 | mg/l | 75.0-125 | **96.3** | | | |

NORTH CREEK ANALYTICAL
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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 3/3/98 to 3/5/98 |
| 7200 N.W. Front | Project Number: | 98-36 | Received: 3/5/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/8/98 10:12 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0380339** | **Date Prepared: 3/13/98** | | | | | **Extraction Method: GC/MS Volatiles** | | | | |
| **Blank** | **0380339-BLK1** | | | | | | | | | |
| Acetone | 3/13/98 | | | ND | ug/l | 25.0 | | | | |
| Acrolein | " | | | ND | " | 50.0 | | | | |
| Acrylonitrile | " | | | ND | " | 10.0 | | | | |
| Benzene | " | | | ND | " | 2.00 | | | | |
| Bromodichloromethane | " | | | ND | " | 2.00 | | | | |
| Bromoform | " | | | ND | " | 2.00 | | | | |
| Bromomethane | " | | | ND | " | 10.0 | | | | |
| 2-Butanone | " | | | ND | " | 25.0 | | | | |
| Carbon disulfide | " | | | ND | " | 5.00 | | | | |
| Carbon tetrachloride | " | | | ND | " | 2.00 | | | | |
| Chlorobenzene | " | | | ND | " | 2.00 | | | | |
| Chloroethane | " | | | ND | " | 10.0 | | | | |
| C[illegible]roform | " | | | ND | " | 2.00 | | | | |
| [illegible]romethane | " | | | ND | " | 10.0 | | | | |
| Dibromochloromethane | " | | | ND | " | 2.00 | | | | |
| Dibromomethane | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichloro-2-butene | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| Dichlorodifluoromethane | " | | | ND | " | 10.0 | | | | |
| 1,1-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| cis-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| trans-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloropropane | " | | | ND | " | 2.00 | | | | |
| cis-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| trans-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| Ethyl Methacrylate | " | | | ND | " | 2.00 | | | | |
| Ethylbenzene | " | | | ND | " | 2.00 | | | | |
| 2-Hexanone | " | | | ND | " | 5.00 | | | | |
| Iodomethane | " | | | ND | " | 10.0 | | | | |
| 4-Methyl-2-pentanone | " | | | ND | " | 5.00 | | | | |
| Methylene chloride | " | | | ND | " | 5.00 | | | | |
| Styrene | " | | | ND | " | 2.00 | | | | |
| 1,1,2,2-Tetrachloroethane | " | | | ND | " | 2.00 | | | | |



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NORTH CREEK ANALYTICAL
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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 3/3/98 to 3/5/98 |
| 7200 N.W. Front | Project Number: | 98-36 | Received: 3/5/98 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/8/98 10:12 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **0380339-BLK1** | | | | | | | | | |
| Tetrachloroethene | 3/13/98 | | | **ND** | ug/l | **2.00** | | | | |
| Toluene | " | | | **ND** | " | **2.00** | | | | |
| 1,1,1-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| 1,1,2-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| Trichloroethene | " | | | **ND** | " | **2.00** | | | | |
| Trichlorofluoromethane | " | | | **ND** | " | **10.0** | | | | |
| 1,2,3-Trichloropropane | " | | | **ND** | " | **5.00** | | | | |
| Vinyl Acetate | " | | | **ND** | " | **5.00** | | | | |
| Vinyl chloride | " | | | **ND** | " | **10.0** | | | | |
| Xylenes (total) | " | | | **ND** | " | **2.00** | | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *20.9* | " | *75.0-130* | *104* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.9* | " | *75.0-130* | *99.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.3* | " | *75.0-130* | *101* | | | |
| | **0380339-BS1** | | | | | | | | | |
| Benzene | 3/13/98 | 20.0 | | 20.8 | ug/l | 76.0-127 | 104 | | | |
| Chlorobenzene | " | 20.0 | | 21.0 | " | 75.0-130 | 105 | | | |
| 1,1-Dichloroethene | " | 20.0 | | 21.6 | " | 61.0-145 | 108 | | | |
| Toluene | " | 20.0 | | 21.6 | " | 76.0-125 | 108 | | | |
| Trichloroethene | " | 20.0 | | 20.2 | " | 71.0-120 | 101 | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *20.5* | " | *75.0-130* | *103* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *20.0* | " | *75.0-130* | *100* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.2* | " | *75.0-130* | *101* | | | |
| **LCS Dup** | **0380339-BSD1** | | | | | | | | | |
| Benzene | 3/13/98 | 20.0 | | 20.1 | ug/l | 76.0-127 | 101 | 11.0 | 2.93 | |
| Chlorobenzene | " | 20.0 | | 20.6 | " | 75.0-130 | 103 | 13.0 | 1.92 | |
| 1,1-Dichloroethene | " | 20.0 | | 21.3 | " | 61.0-145 | 106 | 14.0 | 1.87 | |
| Toluene | " | 20.0 | | 21.3 | " | 76.0-125 | 106 | 13.0 | 1.87 | |
| Trichloroethene | " | 20.0 | | 19.9 | " | 71.0-120 | 99.5 | 14.0 | 1.50 | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.3* | " | *75.0-130* | *96.5* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *20.2* | " | *75.0-130* | *101* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.2* | " | *75.0-130* | *101* | | | |



SCOEPA00035480

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) ... FAX ...
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (... 200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 ...43-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

**Work Order #**

REPORT TO: Wacker Siltronic Corporation
ATTENTION: Thomas J. Rothschild
ADDRESS: 7200 NW Front Avenue
Portland, Oregon 97210
PHONE: 243-2020 FAX: 503-417-4144
PROJECT NAME: –
PROJECT NUMBER: 98-36
SAMPLED BY: Thomas J. Rothschild

INVOICE TO: Wacker
ATTENTION: Accounts Payable
ADDRESS: P.O. Box 83180
Portland, Oregon 97283-0180
P.O. NUMBER: 405748 NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 (Standard) | 7 | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: 5 (Standard) | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

Analysis Request:

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | EPA 8240 | Aqueous Cu, Pb, Zn | As, Hg | Cr (T) | | | | | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 98-36 | 3 Mar 98 1130 | | X | | | | | | | | W | 2 | [illegible] |
| 2. | 98-37 | 3-4-98 0720 | | X | | | | | | | | W | 2 | [illegible] |
| 3. | 98-38 | 3-4-98 1150 | | | X | X | | | | | | W | 1 | [illegible] |
| 4. | 98-39 | 3/5/98 0600 | | | | | X | | | | | W | 1 | [illegible] |
| 5. | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | |

RELINQUISHED BY (Signature): Dianne E Mullan DATE: 3/5/98
PRINT NAME: Dianne Mullan FIRM: Wacker TIME: 0930
RECEIVED BY (Signature): [signature] DATE:
PRINT NAME: Larry Spingle FIRM: [illegible] TIME:
RELINQUISHED BY (Signature): DATE:
PRINT NAME: FIRM: TIME:
RECEIVED BY (Signature): DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS: #4) Please use detection limit of 0.001 ppm for Cr (T)

PAGE 1 OF 1

COC Rev 8, 1/96

SCOEPA00035481

March 12, 1998 ER058:TM

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the February, 1998 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01.

Per our telephone conversation, I have included a summary of the incident that occurred on January 28, 1998.

- Fab 1 was shut down for electrical transformer and switchgear maintenance Tuesday, January 27 through Wednesday, January 28, 1998. All critical systems were placed on emergency generator power.
- DI water was circulated through benches to prevent stagnation and bacterial growth. However, no process wastewater was produced.
- Water in the OWW forwarding sump reached the high level. The generator supplying power to the forwarding sump pump was unable to carry the flow.
- Water overflowed to the sanitary sewer. This water did not contain any hazardous materials, and consequently would not have damaged the collection system.
- Facilities Operations was immediately aware of the situation. A sample was pulled at the OWW forwarding sump shortly after the incident. The pH was 9.9.
- Time of incident was 09:50 – 10:00 (approximately 10 minutes). Estimated flow: 110 GPM, conservative total of 1,100 gallons.
- Power to the OWW forwarding sump pump was restored via transformer T-4. Flow routed to wastewater treatment plant.

Wacker Siltronic is currently in compliance with the Permit for this reporting period.
If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report
cc: Tom Rothschild
POTW-IDR File



SCOEPA00035482

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: **MARCH 15, 1998**

SAMPLING PERIOD: February, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| Fab 2 pipe | Foxboro | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| NO pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.5 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Thomas C. McClure Date: 3/12/98

S:\CUSTOMER\IU-W\WACKER\INSP-MON\98CONTPH.DOC

SCOEPA00035483

RETURN TO: PETRA MATTES MS 30
Z 463 352 316

US Postal Service
**Receipt for Certified Mail**
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to<br>TIM DEAN, BES | |
| Street & Number<br>6543 N BURLINGTON AVE | |
| Post Office, State, & ZIP Code<br>PORTLAND, OR 97203-5452 | |
| Postage | $ .32 |
| Certified Fee | .35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | .10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| **TOTAL** Postage & Fees | $ 2.77 |
| Postmark or Date | |

PORTLAND, OR SAINT JOHNS STA
MAR 13 1998
USPS

PS Form **3800**, April 1995

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BES
6543 N Burlington Ave
Portland, OR 97203-5452

4a. Article Number
Z463 352 316

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
3-16-98

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

**RETURN ADDRESS completed on the reverse side?**

SCOEPA00035484

February 5, 1998 ER052:TM

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the January 1998 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035485

# CITY OF PORTLAND
# INDUSTRIAL WASTEWATER DISCHARGE
# SELF-MONITORING REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: **FEBRUARY 15, 1998**

SAMPLING PERIOD: January, 1998

**For Industrial Source Control Division Use Only**

**Date Postmarked/Received** **Date Entered**

**Entered By:**

**Comments:**

## CONTINUOUSLY MONITORED pH - EPA METHOD 150.1

| POINT OF COMPLIANCE | pH METER BRAND | pH METER MODEL | pH Limit |
|---|---|---|---|
| Fab 2 pipe | Foxboro | 761 | 5.5 - 11.5 S.U. |

| DATE | STARTING TIME (military time) | MOST EXTREME pH EXCURSION | DURATION (minutes) | VIOLATION? (circle one) | | COMMENTS |
|---|---|---|---|---|---|---|
| No pH EXCURSIONS | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |
| | | | | YES | NO | |

Instructions: Industrial Source Control Division (ISCD) must be notified of all discharge violations within 24 hours of your knowledge of the violation. Report all pH excursions on this form and circle YES if they are a violation. Include any appropriate comments in the Comment column regarding the nature of the excursion. Attach supporting data or explanations to this report. You are also required to document corrective actions you have taken in response to the excursion.

Violations:
1. pH excursions outside the range of 5.5 - 11.5 SU for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions less than or equal to 5.0 SU or greater than or equal to 12.5 SU regardless of duration.

Non-Violations: You may contend an excursion does not represent a pH discharge violation if it does not meet the criteria listed above. Circle NO in the VIOLATION? column and include a copy of the pH log or pH chart recording showing the excursion. The final violation status of the excursion will be determined by the ISCD.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Thomas C. McCue Date: 2/5/98

S:\CUSTOMER\IU-W\WACKER\INSP-MON\98CONTPH.DOC

SCOEPA00035486

PETRA MATTES M/S 30

Z 463 352 311

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to TIM DEAN - BES | |
| Street & Number 6543 N Burlington Ave | |
| Post Office, State, & ZIP Code Portland, OR 97203-5452 | |
| Postage | $ 1.32 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| **TOTAL** Postage & Fees | $ 2.77 |
| Postmark or Date | |

PS Form **3800**, April 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUREAU OF ENVIRONMENTAL SERVICES
6543 N. BURLINGTON AVE.
PORTLAND, OR 97203-5452

4a. Article Number

Z463 352 311

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery 2-9-99

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*

X Andy Bruno

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

SCOEPA00035487

WACKER
Wacker Siltronic Corporation

January 12, 1998

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean:

Enclosed is the December, 1997 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic had a 20-second pH violation on December 30, 1997.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

Enclosure:
(1) Industrial Discharge Report

Cc: Tom Rothschild



SCOEPA00035488

Z 463 358 729

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to | Jim Dean |
| Street & Number | City of PTD |
| Post Office, State, & ZIP Code | |
| Postage | $ .55 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 3.00 |
| Postmark or Date | |

PS Form **3800**, April 1995

SCOEPA00035489

**Stick postage stamps to article to cover First-Class postage, certified mail fee, and charges for any selected optional services** *(See front).*

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached, and present the article at a post office service window or hand it to your rural carrier *(no extra charge).*

2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach, and retain the receipt, and mail the article.

3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article **RETURN RECEIPT REQUESTED** adjacent to the number.

4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.

5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.

6. Save this receipt and present it if you make an inquiry. 102595-97-B-0145

PS Form **3800,** April 1995 *(Reverse)*

SCOEPA00035490

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Tim Dean
BES
6543 N. Burlington
Portland, OR 97203-5452

4a. Article Number
Z463 358 729

4b. Service Type

- ☐ Registered
- ☑ Certified
- ☐ Express Mail
- ☐ Insured
- ☐ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery
1-15-97

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811,** December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

SCOEPA00035491

UNITED STATES POSTAL SERVICE

PORTLAND, OR
PM

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

o Print your name, address, and ZIP Code in this box o

Wacker Siltronic Corp
PO Box 83180
Portland, OR 97283-0810
attn: Petra Mattos M/S 30

CITY OF PORTLAND
ENVIRONMENTAL SERVICES
1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

# INDUSTRIAL WASTEWATER DISCHARGE SELF-MONITORING REPORT (SMR)

INDUSTRY NAME: WACKER SILTRONIC CORP.

PERMIT NUMBER: 469-001

REPORT DUE DATE: JANUARY 15,

SAMPLING PERIOD: DECEMBER

TODAY'S DATE: January 9, 1998

REPORT TYPE (CHECK ONE):

BASELINE MONITORING

X PERIODIC COMPLIANCE

FINAL COMPLIANCE

*****************
(For City Use Only)
*****************

| SAMPLE DATE | Dec 4, 97 | SAMPLE LOCATION | OWW Pipe | SAMPLE TYPE | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB | Dec 4, 97 | DATE OF SAMPLE ANALYSIS | Dec 12, 97 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT in mg/L Daily | LIMIT in mg/L Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic (Total) | 710 | 0.002 | 0.3 | | No | |
| Cadmium (Total) | 736 | < 0.001 | 0.7 | | No | |
| Copper (Total) | 752 | 0.019 | 2.3 | | No | |
| Chromium (Total) | 748 | 0.011 | 3.8 | | No | |
| Lead (Total) | 811 | 0.002 | 0.7 | | No | |
| Nickel (Total) | 824 | 0.012 | 3.0 | | No | |
| Mercury (Total) | 813 | < 0.0004 | .014 | | No | |
| Zinc (Total) | 874 | 0.02 | 4.0 | | No | |
| | | | | | | |
| Total Toxic Organics (No analysis required | 858 | < 0.04 | 1.37 | | No | TTO CERTIFICATION (See Statement Below |
| pH | 843 | | 5.5-11.5 | | | See monthly data |
| | | | | | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

"Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation (or pretreatment standard) for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no discharge of toxic organics into the wastewaters in excess of the TTO limit has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting (or control) authority."

Wacker - Siltronic Corp. By:

Signature: Thomas G. McCune for J. Pittman Date: January 13, 1998

John L. Pittman, Director of Corporate Engineering

File: S:\IU-W\WACKER\INSP-MON\97SASMR.DOC

SCOEPA00035493

# CITY OF PORTLAND
# ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE
## CONTINUOUS pH SELF-MONITORING REPORT (SMR)

INDUSTRY NAME: Wacker Siltronic Corp.

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** JANUARY 15,

SAMPLING PERIOD: DECEMBER

TODAY'S DATE: January 9, 1998

REPORT TYPE (CHECK ONE):

BASELINE MONITORING

X PERIODIC COMPLIANCE

SPECIAL COMPLIANCE

********** (For City Use Only)

**********

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | Dec 30, 97 | 14:20 | 4.0 SU | 0.3 | Y (N) | | **pH Sample Code: 843** |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Wacker-Siltronic Corp. by:

Signature: thomas c McCue for J. Pittman Date: January 13, 1998

John L. Pittman, Director of Corporate Engineering

**********

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

File; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

SCOEPA00035494

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 12/4/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 12/4/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/30/97 18:53 |

**Total Metals per EPA 200 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 97-247 | | | P712058-01 | | | | Water | |
| **Chromium** | 1270249 | 12/10/97 | 12/12/97 | EPA 200.8 | 0.00100 | **0.00190** | mg/l | |
| 97-249 | | | P712058-03 | | | | Water | |
| **Arsenic** | 1270249 | 12/10/97 | 12/12/97 | EPA 200.8 | 0.00100 | **0.00150** | mg/l | |
| Cadmium | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| **Chromium** | " | " | " | EPA 200.8 | 0.00100 | **0.0114** | " | |
| **Copper** | " | " | " | EPA 200.8 | 0.00200 | **0.0190** | " | |
| **Lead** | " | " | " | EPA 200.8 | 0.00100 | **0.00170** | " | |
| **Nickel** | " | " | " | EPA 200.8 | 0.00200 | **0.0120** | " | |
| Silver | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| **Zinc** | " | " | " | EPA 200.8 | 0.00500 | **0.0202** | " | |
| Mercury | 1270164 | 12/8/97 | 12/8/97 | EPA 245.1 | 0.000400 | ND | " | 1 |



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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 12/4/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 12/4/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/30/97 18:53 |

## Volatile Organic Compounds per EPA Method 8240B
### North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 97-250 | | | P712058-04 | | | | Water | 3 |
| Acetone (ow w grab TTO's) | 1270325 | 12/15/97 | 12/15/97 | | 100 | 973 | ug/l | |
| Acrolein | " | " | " | | 800 | ND | " | |
| Acrylonitrile | " | " | " | | 40.0 | ND | " | |
| Benzene | " | " | " | | 8.00 | ND | " | |
| Bromodichloromethane | " | " | " | | 8.00 | ND | " | |
| Bromoform | " | " | " | | 8.00 | ND | " | |
| Bromomethane | " | " | " | | 40.0 | ND | " | |
| 2-Butanone | " | " | " | | 100 | ND | " | |
| Carbon disulfide | " | " | " | | 20.0 | ND | " | |
| Carbon tetrachloride | " | " | " | | 8.00 | ND | " | |
| Chlorobenzene | " | " | " | | 8.00 | ND | " | |
| Chloroethane | " | " | " | | 40.0 | ND | " | |
| Chloroform | " | " | " | | 8.00 | 11.0 | " | |
| Chloromethane | " | " | " | | 40.0 | ND | " | |
| Dibromochloromethane | " | " | " | | 8.00 | ND | " | |
| Dibromomethane | " | " | " | | 8.00 | ND | " | |
| 1,4-Dichloro-2-butene | " | " | " | | 40.0 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 8.00 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 8.00 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 8.00 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 20.0 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 8.00 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 8.00 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 8.00 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 8.00 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 8.00 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 8.00 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 8.00 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 8.00 | ND | " | |
| Ethyl Methacrylate | " | " | " | | 8.00 | ND | " | |
| Ethylbenzene | " | " | " | | 8.00 | ND | " | |
| 2-Hexanone | " | " | " | | 20.0 | ND | " | |
| Iodomethane | " | " | " | | 20.0 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 20.0 | ND | " | |
| Methylene chloride | " | " | " | | 20.0 | ND | " | |
| Styrene | " | " | " | | 8.00 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 8.00 | ND | " | |
| Tetrachloroethene | " | " | " | | 8.00 | ND | " | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035496

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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 12/4/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 12/4/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/30/97 18:53 |

## Volatile Organic Compounds per EPA Method 8240B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **97-250 (continued)** | | | **P712058-04** | | | | **Water** | **3** |
| Toluene | 1270325 | 12/15/97 | 12/15/97 | | 8.00 | ND | ug/l | |
| 1,1,1-Trichlorocthanc | " | " | " | | 8.00 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 8.00 | ND | " | |
| Trichlorocthene | " | " | " | | 8.00 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 8.00 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 20.0 | ND | " | |
| Vinyl Acetate | " | " | " | | 20.0 | ND | " | |
| Vinyl chloridc | " | " | " | | 20.0 | ND | " | |
| Xylenes (total) | " | " | " | | 8.00 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *75.0-130* | | *104* | % | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *75.0-130* | | *121* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *75.0-130* | | *97.5* | " | |



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SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 12/4/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 12/4/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/30/97 18:53 |

## [illegible] Metals per EPA 200 Series Methods - Quality Control
### North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 1270164** | **Date Prepared: 12/8/97** | | | | | **Extraction Method: Metals** | | | | |
| **Blank** | **1270164-BLK1** | | | | | | | | | |
| Mercury | 12/8/97 | | | ND | mg/l | 0.000200 | | | | |
| **LCS** | **1270164-BS1** | | | | | | | | | |
| Mercury | 12/8/97 | 0.00500 | | 0.00490 | mg/l | 85.0-115 | 98.0 | | | |
| **Duplicate** | **1270164-DUP1** | | **P712089-02** | | | | | | | |
| Mercury | 12/8/97 | | ND | ND | mg/l | | | 20.0 | | |
| **Matrix Spike** | **1270164-MS1** | | **P712089-02** | | | | | | | |
| Mercury | 12/8/97 | 0.00500 | ND | 0.00500 | mg/l | 75.0-125 | 100 | | | |
| **Batch: 1270249** | **Date Prepared: 12/10/97** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **1270249-BLK1** | | | | | | | | | |
| Arsenic | 12/11/97 | | | ND | mg/l | 0.00100 | | | | |
| Cadmium | " | | | ND | " | 0.00100 | | | | |
| Chromium | " | | | ND | " | 0.00100 | | | | |
| Copper | " | | | ND | " | 0.00200 | | | | |
| Lead | " | | | ND | " | 0.00100 | | | | |
| Nickel | " | | | ND | " | 0.00200 | | | | |
| Silver | " | | | ND | " | 0.00100 | | | | |
| Zinc | " | | | ND | " | 0.00500 | | | | |
| **LCS** | **1270249-BS1** | | | | | | | | | |
| Arsenic | 12/11/97 | 0.100 | | 0.0963 | mg/l | 80.0-110 | 96.3 | | | |
| Cadmium | " | 0.100 | | 0.0964 | " | 85.0-115 | 96.4 | | | |
| Chromium | " | 0.100 | | 0.0957 | " | 85.0-115 | 95.7 | | | |
| Copper | " | 0.100 | | 0.0958 | " | 85.0-115 | 95.8 | | | |
| Lead | " | 0.100 | | 0.0898 | " | 85.0-115 | 89.8 | | | |
| Nickel | " | 0.100 | | 0.0946 | " | 85.0-115 | 94.6 | | | |
| Silver | " | 0.0500 | | 0.0464 | " | 85.0-115 | 92.8 | | | |
| Zinc | " | 0.100 | | 0.0966 | " | 80.0-110 | 96.6 | | | |
| **Duplicate** | **1270249-DUP1** | | **P712034-01** | | | | | | | |
| Arsenic | 12/15/97 | | ND | ND | mg/l | | | 20.0 | | 4 |
| Cadmium | " | | ND | ND | " | | | 20.0 | | 4 |
| Chromium | " | | 0.129 | 0.134 | " | | | 20.0 | 3.80 | 4 |
| Copper | " | | ND | ND | " | | | 20.0 | | 4 |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager



SCOEPA00035498

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 12/4/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 12/4/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/30/97 18:53 |

[redacted]

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate (continued)** | **1270249-DUP1** | | **P712034-01** | | | | | | | |
| Lead | 12/15/97 | | ND | ND | mg/l | | | 20.0 | | 4 |
| Nickel | " | | 0.0540 | 0.0540 | " | | | 20.0 | 0 | 4 |
| Silver | " | | ND | ND | " | | | 20.0 | | 4 |
| Zinc | " | | ND | ND | " | | | 20.0 | | 4 |
| **Matrix Spike** | **1270249-MS1** | | **P712034-01** | | | | | | | |
| Arsenic | 12/15/97 | 0.100 | ND | 0.112 | mg/l | 70.0-130 | **112** | | | 4 |
| Cadmium | " | 0.100 | ND | 0.109 | " | 70.0-130 | **109** | | | 4 |
| Chromium | " | 0.100 | 0.129 | 0.241 | " | 70.0-130 | **112** | | | 4 |
| Copper | " | 0.100 | ND | 0.114 | " | 70.0-130 | **114** | | | 4 |
| Lead | " | 0.100 | ND | 0.102 | " | 70.0-130 | **102** | | | 4 |
| Nickel | " | 0.100 | 0.0540 | 0.160 | " | 70.0-130 | **106** | | | 4 |
| Silver | " | 0.0500 | ND | 0.0340 | " | 70.0-130 | **68.0** | | | 4,5 |
| Zinc | " | 0.100 | ND | 0.139 | " | 70.0-130 | **139** | | | 4,5 |
| **Matrix Spike** | **1270249-MS2** | | **P712058-01** | | | | | | | |
| Arsenic | 12/12/97 | 0.100 | 0.00170 | 0.109 | mg/l | 70.0-130 | **107** | | | |
| Cadmium | " | 0.100 | ND | 0.0993 | " | 70.0-130 | **99.3** | | | |
| Chromium | " | 0.100 | 0.00190 | 0.114 | " | 70.0-130 | **112** | | | |
| Copper | " | 0.100 | 0.00710 | 0.112 | " | 70.0-130 | **105** | | | |
| Lead | " | 0.100 | ND | 0.0946 | " | 70.0-130 | **94.6** | | | |
| Nickel | " | 0.100 | 0.00350 | 0.109 | " | 70.0-130 | **105** | | | |
| Silver | " | 0.0500 | ND | 0.0487 | " | 70.0-130 | **97.4** | | | |
| Zinc | " | 0.100 | 0.00780 | 0.0954 | " | 70.0-130 | **87.6** | | | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



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Environmental Laboratory Services

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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 12/4/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 12/4/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/30/97 18:53 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control

North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 1270325** | **Date Prepared: 12/15/97** | | | | | **Extraction Method: GC/MS Volatiles** | | | | |
| **Blank** | **1270325-BLK1** | | | | | | | | | |
| Acetone | 12/15/97 | | | ND | ug/l | 25.0 | | | | |
| Acrolein | " | | | ND | " | 200 | | | | |
| Acrylonitrile | " | | | ND | " | 10.0 | | | | |
| Benzene | " | | | ND | " | 2.00 | | | | |
| Bromodichloromethane | " | | | ND | " | 2.00 | | | | |
| Bromoform | " | | | ND | " | 2.00 | | | | |
| Bromomethane | " | | | ND | " | 10.0 | | | | |
| 2-Butanone | " | | | ND | " | 25.0 | | | | |
| Carbon disulfide | " | | | ND | " | 5.00 | | | | |
| Carbon tetrachloride | " | | | ND | " | 2.00 | | | | |
| Chlorobenzene | " | | | ND | " | 2.00 | | | | |
| Chloroethane | " | | | ND | " | 10.0 | | | | |
| Chloroform | " | | | ND | " | 2.00 | | | | |
| Chloromethane | " | | | ND | " | 10.0 | | | | |
| Dibromochloromethane | " | | | ND | " | 2.00 | | | | |
| Dibromomethane | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichloro-2-butene | " | | | ND | " | 10.0 | | | | |
| 1,2-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| Dichlorodifluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,1-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| cis-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| trans-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloropropane | " | | | ND | " | 2.00 | | | | |
| cis-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| trans-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| Ethyl Methacrylate | " | | | ND | " | 2.00 | | | | |
| Ethylbenzene | " | | | ND | " | 2.00 | | | | |
| 2-Hexanone | " | | | ND | " | 5.00 | | | | |
| Iodomethane | " | | | ND | " | 5.00 | | | | |
| 4-Methyl-2-pentanone | " | | | ND | " | 5.00 | | | | |
| Methylene chloride | " | | | ND | " | 5.00 | | | | |
| Styrene | " | | | ND | " | 2.00 | | | | |
| 1,1,2,2-Tetrachloroethane | " | | | ND | " | 2.00 | | | | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



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NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (425) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 12/4/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 12/4/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/30/97 18:53 |

[redacted]

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **1270325-BLK1** | | | | | | | | | |
| Tetrachloroethene | 12/15/97 | | | ND | ug/l | 2.00 | | | | |
| Toluene | " | | | ND | " | 2.00 | | | | |
| 1,1,1-Trichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1,2-Trichloroethane | " | | | ND | " | 2.00 | | | | |
| Trichloroethene | " | | | ND | " | 2.00 | | | | |
| Trichlorofluoromethane | " | | | ND | " | 2.00 | | | | |
| 1,2,3-Trichloropropane | " | | | ND | " | 5.00 | | | | |
| Vinyl Acetate | " | | | ND | " | 5.00 | | | | |
| Vinyl chloride | " | | | ND | " | 5.00 | | | | |
| Xylenes (total) | " | | | ND | " | 2.00 | | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *22.2* | " | *75.0-130* | *111* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *22.9* | " | *75.0-130* | *114* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.8* | " | *75.0-130* | *99.0* | | | |
| **LCS** | **1270325-BS1** | | | | | | | | | |
| Benzene | 12/15/97 | 20.0 | | 21.7 | ug/l | 76.0-127 | 109 | | | |
| Chlorobenzene | " | 20.0 | | 21.0 | " | 75.0-130 | 105 | | | |
| 1,1-Dichloroethene | " | 20.0 | | 18.7 | " | 61.0-145 | 93.5 | | | |
| Toluene | " | 20.0 | | 21.0 | " | 76.0-125 | 105 | | | |
| Trichloroethene | " | 20.0 | | 18.2 | " | 71.0-120 | 91.0 | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *21.9* | " | *75.0-130* | *109* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *22.4* | " | *75.0-130* | *112* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.7* | " | *75.0-130* | *98.5* | | | |
| **LCS Dup** | **1270325-BSD1** | | | | | | | | | |
| Benzene | 12/15/97 | 20.0 | | 22.2 | ug/l | 76.0-127 | 111 | 11.0 | 1.82 | |
| Chlorobenzene | " | 20.0 | | 20.0 | " | 75.0-130 | 100 | 13.0 | 4.88 | |
| 1,1-Dichloroethene | " | 20.0 | | 20.1 | " | 61.0-145 | 101 | 14.0 | 7.71 | |
| Toluene | " | 20.0 | | 20.3 | " | 76.0-125 | 101 | 13.0 | 3.88 | |
| Trichloroethene | " | 20.0 | | 18.0 | " | 71.0-120 | 90.0 | 14.0 | 1.10 | |
| *Surrogate: 4-BFB* | " | *20.0* | | *23.0* | " | *75.0-130* | *115* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *22.8* | " | *75.0-130* | *114* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.6* | " | *75.0-130* | *98.0* | | | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035501

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | N/A | Sampled: 12/4/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 12/4/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/30/97 18:53 |

## Notes and Definitions

| # | Note |
|---|---|
| 1 | Reporting limits raised due to matrix interference. |
| 2 | Result is an estimated value. The GC/MS is calibrated to a concentration of 400 ppb. The sample concentration at 409 ppb is 2.25% above calibration range. |
| 3 | Reporting limits raised due to dilution necessary for analysis. |
| 4 | The reporting limit for this analyte was raised due to matrix interference. |
| 5 | The spike recovery for this QC sample is outside of established control limits due to sample matrix interference. |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| Recov. | Recovery |
| RPD | Relative Percent Difference |

North Creek Analytical, Inc.

Mary A. Fritzmann Smith, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
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SCOEPA00035502

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (20[illegible]200 FAX 485-2902
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) [illegible]-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202 X

# CHAIN OF CUSTODY REPORT

**Work Order #**

REPORT TO: Wacker Siltronic
ATTENTION: Tom Rothschild
ADDRESS: 7200 N.W. Front Ave
Portland, OR
PHONE: 213-7374 FAX: 417-4144
PROJECT NAME:
PROJECT NUMBER:
SAMPLED BY: Dianne Mullen

INVOICE TO: Wacker Siltronic
ATTENTION: Accts. Payable
ADDRESS:
P.O. NUMBER: 405748 NCA QUOTE #

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: ~~10~~ Standard | 7 | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: 5 Standard | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Request is less than standard may incur Rush Charges.

Analysis Request

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Cr (T) (2) | TTD (8240) | Metals (1) | As | Hg | | | | | | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 97-247 | 12/04/97 0715 | | X | | | | | | | | | | W | 1 | HNO3 |
| 2. | 97-248 | 0715 | | | X | | | | | | | | | W | 2 | HCL |
| 3. | 97-249 | 0720 | | | | X | X | X | | | | | | W | 1 | HNO3 |
| 4. | 97-250 | 0720 | | | X | | | | | | | | | W | 2 | HCL |
| 5. | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | |

RELINQUISHED BY (Signature): Dianne Mullen DATE: 12/04/97
PRINT NAME: Dianne Mullen FIRM: Wacker TIME: 0900
RELINQUISHED BY (Signature): DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY (Signature): [signature] DATE: 12-4-97
PRINT NAME: Larry Spangler FIRM: NCA TIME: 0900
RECEIVED BY (Signature): DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS: (1) Ag, Cd, Cr, Cu, Ni, Pb, Zn
(2) Please use detect. limit of 2.001 ppm

PAGE 1 OF 1

SCOEPA00035503

November 10, 1997 ER044:TM

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the November, 97 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

CITY OF PORTLAND
ENVIRONMENTAL SERVICES
1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

# INDUSTRIAL WASTEWATER DISCHARGE
# CONTINUOUS pH SELF-MONITORING REPORT (SMR)

INDUSTRY NAME: Wacker Siltronic Corp.

PERMIT NUMBER: 469-001

REPORT DUE DATE: NOVEMBER 15, 1997

SAMPLING PERIOD: OCTOBER 1997

TODAY'S DATE: November 10, 1997

REPORT TYPE (CHECK ONE):
BASELINE MONITORING
X PERIODIC COMPLIANCE
SPECIAL COMPLIANCE

****************
(For City Use Only)
****************

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH Excursions | : | SU | | Y N | | pH Sample Code: 843 |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: John L. Pittman    Date: 11-11-97

John L. Pittman, Director of Corporate Plant Engineering

**************************************************

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

File; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REP DUE DATE: December 15, 1997

SAMPLING PERIOD: November 1997

TODAY'S DATE: December 5, 1997

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | Nov. 1997 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | Nov. 13 1997 | DATE OF SAMPLE ANAL. > | Nov. 25 1997 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | <0.001 | 0.3 | | NO | DATE: |
| Cadmium | 736 | <0.001 | 0.7 | | NO | DATE: |
| Chromium | 748 | 0.004 | 3.8 | | NO | DATE: |
| Copper | 752 | 0.025 | 2.3 | | NO | DATE: |
| Lead | 811 | <0.001 | 0.7 | | NO | DATE: |
| Nickel | 824 | 0.008 | 3.0 | | NO | DATE: |
| Mercury | 813 | <0.001 | 0.14 | | NO | DATE: |
| Zinc | 874 | 0.020 | 4.0 | | NO | DATE: |
| | | | | | | DATE: |
| | | Split with City | of Portland on November 12, 1997. | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
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| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |

certify under penalty of law that this document and all attachments were prepared under my direction or supervision accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information bmitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible r gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, d complete. I am aware that there are significant penalties for submitting false information, including the ssibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

gnature: John L. Pittman Date: December 8, 1997

John L. Pittman, Director of Corporate Engineering

13-1A.
6/24/

SCOEPA00035506

# CITY OF PORTLAND
# ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE
## CONTINUOUS pH SELF-MONITORING REPORT (SMR)

INDUSTRY NAME: Wacker Siltronic Corp.

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** **DECEMBER 15,** 1997

SAMPLING PERIOD: NOVEMBER 1997

TODAY'S DATE: December 5, 1997

REPORT TYPE (CHECK ONE):

BASELINE MONITORING

X PERIODIC COMPLIANCE

SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH Excursions | : | SU | | Y N | | **pH Sample Code: 843** |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: John L. Pittman Date: December 8, 1997

John L. Pittman, Director of Corporate Engineering

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
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3. pH excursions less than 5.0 regardless of duration during any calendar day.

CLAIMED NON-VIOLATIONS:
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File; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL • (425) 481-9200 • FAX 485-2992
SPOKANE • (509) 924-9200 • FAX 924-9290
PORTLAND • (503) 643-9200 • FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 11/12/97 to 11/13/97 |
| 7200 N.W. Front | Project Number: | 97-242,243,244 | Received: 11/13/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/4/97 10:15 |

**Total Metals per EPA 200 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **97-242** | | | **P711198-01** | | | | **Water** | |
| **Chromium** | 1170521 | 11/20/97 | 11/25/97 | EPA 200.8 | 0.00100 | **0.00180** | mg/l | |
| **97-244** | | | **P711198-03** | | | | **Water** | |
| Arsenic | 1170401 | 11/18/97 | 11/20/97 | EPA 200.8 | 0.00100 | ND | mg/l | |
| Cadmium | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| **Chromium** | " | " | " | EPA 200.8 | 0.00100 | **0.00445** | " | |
| **Copper** | " | " | " | EPA 200.8 | 0.00200 | **0.0248** | " | |
| Lead | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| **Nickel** | " | " | " | EPA 200.8 | 0.00200 | **0.00761** | " | |
| Silver | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| **Zinc** | " | " | " | EPA 200.8 | 0.00500 | **0.0195** | " | |
| Mercury | 1170385 | 11/19/97 | 11/24/97 | EPA 245.1 | 0.000800 | ND | " | 1 |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

Mary Al Fritzmann Smith, Project Manager

18939 120th Avenue N.E. Suite 101, Bothell WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
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SCOEPA00035508

NORTH CREEK ANALYTICAL
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SPOKANE • (509) 924-9200 • FAX 924-9290
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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 11/12/97 to 11/13/97 |
| 7200 N.W. Front | Project Number: | 97-242,243,244 | Received: 11/13/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/4/97 10:15 |

## Total Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 1170385** | **Date Prepared: 11/19/97** | | | | | **Extraction Method: Metals** | | | | |
| **Blank** | **1170385-BLK1** | | | | | | | | | |
| Mercury | 11/24/97 | | | ND | mg/l | 0.000200 | | | | |
| **LCS** | **1170385-BS1** | | | | | | | | | |
| Mercury | 11/24/97 | 0.00500 | | 0.00450 | mg/l | 85.0-115 | 90.0 | | | |
| **Duplicate** | **1170385-DUP1** | | **P711077-01** | | | | | | | |
| Mercury | 11/24/97 | | ND | ND | mg/l | | | 20.0 | | 1 |
| **Matrix Spike** | **1170385-MS1** | | **P711077-01** | | | | | | | |
| Mercury | 11/24/97 | 0.0100 | ND | 0.0115 | mg/l | 75.0-125 | **115** | | | 1 |
| **Matrix Spike** | **1170385-MS2** | | **P711079-01** | | | | | | | |
| Mercury | 11/24/97 | 0.0100 | ND | 0.0110 | mg/l | 75.0-125 | **110** | | | 1 |
| **Matrix Spike Dup** | **1170385-MSD1** | | **P711077-01** | | | | | | | |
| Mercury | 11/24/97 | 0.0100 | ND | 0.0101 | mg/l | 75.0-125 | **101** | | 13.0 | 1,3 |
| **Batch: 1170401** | **Date Prepared: 11/18/97** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **1170401-BLK1** | | | | | | | | | |
| Arsenic | 11/19/97 | | | ND | mg/l | 0.00100 | | | | |
| Cadmium | " | | | ND | " | 0.000100 | | | | |
| Chromium | " | | | ND | " | 0.00100 | | | | |
| Copper | " | | | ND | " | 0.00100 | | | | |
| Lead | " | | | ND | " | 0.00100 | | | | |
| Nickel | " | | | ND | " | 0.00100 | | | | |
| Silver | " | | | ND | " | 0.000100 | | | | |
| Zinc | " | | | ND | " | 0.00500 | | | | |
| **LCS** | **1170401-BS1** | | | | | | | | | |
| Arsenic | 11/19/97 | 0.100 | | 0.101 | mg/l | 80.0-110 | 101 | | | |
| Cadmium | " | 0.100 | | 0.100 | " | 85.0-115 | 100 | | | |
| Chromium | " | 0.100 | | 0.104 | " | 85.0-115 | 104 | | | |
| Copper | " | 0.100 | | 0.103 | " | 85.0-115 | 103 | | | |
| Lead | " | 0.100 | | 0.0991 | " | 85.0-115 | 99.1 | | | |
| Nickel | " | 0.100 | | 0.102 | " | 85.0-115 | 102 | | | |
| Silver | " | 0.0500 | | 0.0464 | " | 85.0-115 | 92.8 | | | |
| Zinc | " | 0.100 | | 0.103 | " | 80.0-110 | 103 | | | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager



SCOEPA00035509

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL • (425) 481-9200 • FAX 485-2992
SPOKANE • (509) 924-9200 • FAX 924-9290
PORTLAND • (503) 643-9200 • FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 11/12/97 to 11/13/97 |
| 7200 N.W. Front | Project Number: | 97-242,243,244 | Received: 11/13/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/4/97 10:15 |

## Total Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate** | **1170401-DUP1** | | **P711114-05** | | | | | | | |
| Arsenic | 11/19/97 | | 0.0456 | 0.0449 | mg/l | | | 20.0 | **1.55** | |
| Cadmium | " | | ND | ND | " | | | 20.0 | | |
| Chromium | " | | 0.00174 | 0.00171 | " | | | 20.0 | **1.74** | |
| Copper | " | | 0.00333 | 0.00357 | " | | | 20.0 | **6.96** | |
| Lead | " | | ND | ND | " | | | 20.0 | | |
| Nickel | " | | 0.00281 | 0.00285 | " | | | 20.0 | **1.41** | |
| Silver | " | | ND | ND | " | | | 20.0 | | |
| Zinc | " | | 0.00694 | 0.0156 | " | | | 20.0 | **76.8** | 4 |
| **Matrix Spike** | **1170401-MS1** | | **P711114-05** | | | | | | | |
| Arsenic | 11/20/97 | 0.100 | 0.0456 | 0.142 | mg/l | 70.0-130 | **96.4** | | | |
| Cadmium | " | 0.100 | ND | 0.0942 | " | 70.0-130 | **94.2** | | | |
| Chromium | " | 0.100 | 0.00174 | 0.0980 | " | 70.0-130 | **96.3** | | | |
| Copper | " | 0.100 | 0.00333 | 0.0994 | " | 70.0-130 | **96.1** | | | |
| Lead | " | 0.100 | ND | 0.0891 | " | 70.0-130 | **89.1** | | | |
| Nickel | " | 0.100 | 0.00281 | 0.0987 | " | 70.0-130 | **95.9** | | | |
| Silver | " | 0.0500 | ND | 0.0450 | " | 70.0-130 | **90.0** | | | |
| Zinc | " | 0.100 | 0.00694 | 0.0959 | " | 70.0-130 | **89.0** | | | |
| **Matrix Spike** | **1170401-MS2** | | **P711128-02** | | | | | | | |
| Arsenic | 11/20/97 | 0.100 | 0.00222 | 0.110 | mg/l | 70.0-130 | **108** | | | |
| Cadmium | " | 0.100 | ND | 0.0906 | " | 70.0-130 | **90.6** | | | |
| Chromium | " | 0.100 | 0.00143 | 0.112 | " | 70.0-130 | **111** | | | |
| Copper | " | 0.100 | 0.0424 | 0.143 | " | 70.0-130 | **101** | | | |
| Lead | " | 0.100 | 0.0221 | 0.109 | " | 70.0-130 | **86.9** | | | |
| Nickel | " | 0.100 | 0.00531 | 0.106 | " | 70.0-130 | **101** | | | |
| Silver | " | 0.0500 | ND | 0.0434 | " | 70.0-130 | **86.8** | | | |
| Zinc | " | 0.100 | 0.0413 | 0.128 | " | 70.0-130 | **86.7** | | | |
| **Batch: 1170521** | **Date Prepared: 11/24/97** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **1170521-BLK1** | | | | | | | | | |
| Chromium | 11/25/97 | | | ND | mg/l | **0.00100** | | | | |
| **LCS** | **1170521-BS1** | | | | | | | | | |
| Chromium | 11/25/97 | 0.100 | | 0.105 | mg/l | 85.0-115 | 105 | | | |
| **Duplicate** | **1170521-DUP1** | | **P711327-01** | | | | | | | |
| Chromium | 11/25/97 | | ND | ND | mg/l | | | 20.0 | | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

Mary A. Fritzmann Smith, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035510

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

**Work Order #** P709325

REPORT TO: Wacker Siltronic Corporation
ATTENTION: Thomas J. Rothschild
ADDRESS: 7200 N.W. Front Avenue
Portland, Oregon 97210
PHONE: 243-2020 FAX: 503-417-4144
PROJECT NAME: –
PROJECT NUMBER: 97-199
SAMPLED BY: City of Portland

INVOICE TO: Wacker Siltronic Corp.
ATTENTION: Accounts Payable
ADDRESS: P.O. Box 83180
Portland, Oregon 97283-0180
P.O. NUMBER: NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: [10] Standard | 7 | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: [5] Standard | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

| CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Analysis Request: Metals (6) | As | Hg | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| 1. 97-199 | 16 Sep 97 0916 | | X | X | X | W | 1 | HNO3 Preserved |
| 2. | | | | | | | | |
| 3. | | | | | | | | |
| 4. | | | | | | | | |
| 5. | | | | | | | | |
| 6. | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10. | | | | | | | | |

RELINQUISHED BY (Signature): DATE:
PRINT NAME: FIRM: Wacker TIME:
RELINQUISHED BY (Signature): Larry Spangler DATE: 9-17-97
PRINT NAME: Larry Spangler FIRM: NCA TIME: 1025

RECEIVED BY (Signature): Larry Spangler DATE: 9-17-97
PRINT NAME: Larry Spangler FIRM: NCA TIME: 0925
RECEIVED BY (Signature): Sara Mc Clurg DATE: 9-17-97
PRINT NAME: Sara Mc Clurg FIRM: NCA TIME: 1025

ADDITIONAL REMARKS: (1) Ag, Cd, Cr, Cu, Ni, Pb, Zn

PAGE 2 OF 2

SCOEPA00035511

WACKER
Wacker Siltronic Corporation

October 9, 1997 ER38:ES

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the September Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035512

Spiering MS 30

Z 282 748 130

US Postal Service
**Receipt for Certified Mail**
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to TIM DEAN BUR ENVIRON SERV | |
| Street & Number 6543 N. BURLINGTON AVE | |
| Post Office, State, & ZIP Code PORTLAND, OR. 97203-5452 | |
| Postage | $ .78 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 3.23 |
| Postmark or Date OCT 10 1997 | |

PS Form **3800**, April 1995

POSTMASTER SAINT JOHNS, OR
USPS

SCOEPA00035513

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUREAU OF ENVIRON. SERV
6543 N. BURLINGTON AVE
PORTLAND, OR. 97203-5452

4a. Article Number
Z-282-748-130

4b. Service Type

- ☐ Registered
- ☒ Certified
- ☐ Express Mail
- ☐ Insured
- ☐ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery
14 Oct 97

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form 3811, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

SCOEPA00035514

UNITED STATES POSTAL SERVICE

PORTLAND OR 97
PM
1997

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

o Print your name, address, and ZIP Code in this box o

Eric Spearing M/S 30

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

SCOEPA00035515

# CITY OF PORTLAND ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE CONTINUOUS pH SELF-MONITORING REPORT (SMR)

NDUSTRY NAME: Wacker Siltronic Corp.
'ERMIT NUMBER: 469-001
REPORT DUE DATE: OCTOBER 15, 1997
SAMPLING PERIOD: SEPTEMBER 1997
TODAY'S DATE: October 9, 1997

REPORT TYPE (CHECK ONE):
BASELINE MONITORING
X PERIODIC COMPLIANCE
SPECIAL COMPLIANCE

**************** (For City Use Only) ****************

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH Excurisions | : | SU | | Y N | | pH Sample Code: 843 |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: Thomas C. McCl... Date: 10/10/97

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

File; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

NDUSTRY NAME: Wacker Siltronic Corporation

ERMIT NUMBER: 469-001

EPORT DUE DATE: October 15, 1997

AMPLING PERIOD: September 1997

ODAY'S DATE: October 9, 1997

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | Sep 1997 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 17 Sep 97 | DATE OF SAMPLE ANAL. > | 23 Sep 97 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| rsenic | 710 | 0.001 | 0.3 | | No | DATE: |
| admium | 736 | 0.001 | 0.7 | | No | DATE: |
| hromium | 748 | 0.004 | 3.8 | | No | DATE: |
| opper | 752 | 0.0277 | 2.3 | | No | DATE: |
| ead | 811 | 0.001 | 0.7 | | No | DATE: |
| ickel | 824 | 0.009 | 3.0 | | No | DATE: |
| ercury | 813 | 0.0009 | 0.14 | | No | DATE: |
| inc | 874 | 0.063 | 4.0 | | No | DATE: |
| | | | | | | DATE: |
| plit with City of Portland on | | September 16, 1997 | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
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| | | | | | | DATE: |

ertify under penalty of law that this document and all attachments were prepared under my direction or supervision accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information mitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, complete. I am aware that there are significant penalties for submitting false information, including the sibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

ature: Thomas C. McCune Date: 10/10/97

3-1A.(1)
/24/94

SCOEPA00035517

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

RECEIVED OCT 8 1997
SJR

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 9/16/97 |
| 7200 N.W. Front | Project Number: | 97-199 | Received: 9/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 10/8/97 12:40 |

## ANALYTICAL REPORT FOR SAMPLES:

| Sample Description | Laboratory Sample Number | Sample Matrix | Date Sampled |
|---|---|---|---|
| 97-199 | P709325-01 | Water | 9/16/97 |



SCOEPA00035518

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL • (425) 481-9200 • FAX 485-2992
SPOKANE • (509) 924-9200 • FAX 924-9290
PORTLAND • (503) 643-9200 • FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 9/16/97 |
| 7200 N.W. Front | Project Number: | 97-199 | Received: 9/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 10/8/97 12:40 |

**Total Metals per EPA 200 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 97-199 OWW, 2nd Stage Comp. | | | P709325-01 | | | | Water | |
| Arsenic | 0970556 | 9/22/97 | 9/23/97 | EPA 200.8 | 0.00100 | ND | mg/l | |
| Cadmium | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| Chromium | " | " | " | EPA 200.8 | 0.00100 | 0.00370 | " | |
| Copper | " | " | " | EPA 200.8 | 0.00200 | 0.0276 | " | |
| Lead | " | " | " | EPA 200.8 | 0.00100 | 0.00130 | " | |
| Nickel | " | " | " | EPA 200.8 | 0.00200 | 0.00940 | " | |
| Silver | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| Mercury | 0970547 | 9/23/97 | 9/24/97 | EPA 245.1 | 0.000840 | 0.000882 | " | 1 |

Split with City

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

SW
Mary A. Fritzmann Smith, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



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NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL • (425) 481-9200 • FAX 485-2992
SPOKANE • (509) 924-9200 • FAX 924-9290
PORTLAND • (503) 643-9200 • FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 9/16/97 |
| 7200 N.W. Front | Project Number: | 97-199 | Received: 9/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 10/8/97 12:40 |

## Total Metals per EPA 6000/7000 Series Methods
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **97-199** | | | **P709325-01** | | | | **Water** | |
| **Zinc** | 0970497 | 9/18/97 | 10/7/97 | EPA 6010A | 0.0200 | **0.0630** | mg/l | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager

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East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



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NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 9/16/97 |
| 7200 N.W. Front | Project Number: | 97-199 | Received: 9/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 10/8/97 12:40 |

## Total Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0970547** | **Date Prepared: 9/23/97** | | | | | **Extraction Method: Metals** | | | | |
| **Blank** | **0970547-BLK1** | | | | | | | | | |
| Mercury | 9/24/97 | | | ND | mg/l | 0.000200 | | | | |
| **LCS** | **0970547-BS1** | | | | | | | | | |
| Mercury | 9/24/97 | 0.00500 | | 0.00470 | mg/l | 85.0-115 | 94.0 | | | |
| **Duplicate** | **0970547-DUP1** | | **P708046-01** | | | | | | | |
| Mercury | 9/24/97 | | 0.00340 | 0.00350 | mg/l | | | 20.0 | 2.90 | |
| **Matrix Spike** | **0970547-MS1** | | **P708046-01** | | | | | | | |
| Mercury | 9/24/97 | 0.00500 | 0.00340 | 0.00860 | mg/l | 75.0-125 | 104 | | | |
| **Matrix Spike** | **0970547-MS2** | | **P709239-02** | | | | | | | |
| Mercury | 9/24/97 | 0.00500 | ND | 0.00520 | mg/l | 75.0-125 | 104 | | | |
| **Batch: 0970556** | **Date Prepared: 9/22/97** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **0970556-BLK1** | | | | | | | | | |
| Arsenic | 9/22/97 | | | ND | mg/l | 0.00100 | | | | |
| Cadmium | " | | | ND | " | 0.00100 | | | | |
| Chromium | " | | | ND | " | 0.00100 | | | | |
| Copper | " | | | ND | " | 0.000500 | | | | |
| Lead | " | | | ND | " | 0.000200 | | | | |
| Nickel | " | | | ND | " | 0.00200 | | | | |
| Silver | " | | | ND | " | 0.00100 | | | | |
| **LCS** | **0970556-BS1** | | | | | | | | | |
| Arsenic | 9/22/97 | 0.100 | | 0.0883 | mg/l | 80.0-110 | 88.3 | | | |
| Cadmium | " | 0.100 | | 0.0920 | " | 85.0-115 | 92.0 | | | |
| Chromium | " | 0.100 | | 0.104 | " | 85.0-115 | 104 | | | |
| Copper | " | 0.100 | | 0.101 | " | 85.0-115 | 101 | | | |
| Lead | " | 0.100 | | 0.0968 | " | 85.0-115 | 96.8 | | | |
| Nickel | " | 0.100 | | 0.102 | " | 85.0-115 | 102 | | | |
| Silver | " | 0.0500 | | 0.0445 | " | 85.0-115 | 89.0 | | | |
| **Duplicate** | **0970556-DUP1** | | **P709256-01** | | | | | | | |
| Arsenic | 9/22/97 | | ND | ND | mg/l | | | 20.0 | | |
| Cadmium | " | | ND | ND | " | | | 20.0 | | |
| Chromium | " | | 0.00500 | 0.00480 | " | | | 20.0 | 4.08 | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035521

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 9/16/97 |
| 7200 N.W. Front | Project Number: | 97-199 | Received: 9/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 10/8/97 12:40 |

## Total Metals per EPA 200 Series Methods/Quality Control
### North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate (continued)** | **0970556-DUP1** | | **P709256-01** | | | | | | | |
| Copper | 9/22/97 | | 0.00650 | 0.00700 | mg/l | | | 20.0 | 7.41 | |
| Lead | " | | 0.00460 | 0.00450 | " | | | 20.0 | 2.20 | |
| Nickel | " | | 0.00470 | 0.00470 | " | | | 20.0 | 0 | |
| Silver | " | | ND | ND | " | | | 20.0 | | |
| **Matrix Spike** | **0970556-MS1** | | **P709256-01** | | | | | | | |
| Arsenic | 9/22/97 | 0.100 | ND | 0.0883 | mg/l | 70.0-130 | 88.3 | | | |
| Cadmium | " | 0.100 | ND | 0.0899 | " | 70.0-130 | 89.9 | | | |
| Chromium | " | 0.100 | 0.00500 | 0.107 | " | 70.0-130 | 102 | | | |
| Copper | " | 0.100 | 0.00650 | 0.107 | " | 70.0-130 | 100 | | | |
| Lead | " | 0.100 | 0.00460 | 0.0966 | " | 70.0-130 | 92.0 | | | |
| Nickel | " | 0.100 | 0.00470 | 0.105 | " | 70.0-130 | 100 | | | |
| Silver | " | 0.0500 | ND | 0.0491 | " | 70.0-130 | 98.2 | | | |
| **Matrix Spike** | **0970556-MS2** | | **P709277-02** | | | | | | | |
| Arsenic | 9/22/97 | 0.100 | 0.0186 | 0.107 | mg/l | 70.0-130 | 88.4 | | | |
| Cadmium | " | 0.100 | ND | 0.0909 | " | 70.0-130 | 90.9 | | | |
| Chromium | " | 0.100 | ND | 0.106 | " | 70.0-130 | 106 | | | |
| Copper | " | 0.100 | 0.00470 | 0.105 | " | 70.0-130 | 100 | | | |
| Lead | " | 0.100 | ND | 0.0945 | " | 70.0-130 | 94.5 | | | |
| Nickel | " | 0.100 | ND | 0.100 | " | 70.0-130 | 100 | | | |
| Silver | " | 0.0500 | ND | 0.0509 | " | 70.0-130 | 102 | | | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Mary A. Fritzmann Smith, Project Manager



SCOEPA00035522

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL • (425) 481-9200 • FAX 485-2992
SPOKANE • (509) 924-9200 • FAX 924-9290
PORTLAND • (503) 643-9200 • FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 9/16/97 |
| 7200 N.W. Front | Project Number: | 97-199 | Received: 9/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 10/8/97 12:40 |

## Total Metals per EPA 6000/7000 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0970497** | **Date Prepared: 9/18/97** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **0970497-BLK1** | | | | | | | | | |
| Zinc | 10/7/97 | | | ND | mg/l | 0.0200 | | | | |
| **LCS** | **0970497-BS1** | | | | | | | | | |
| Zinc | 10/7/97 | 0.500 | | 0.559 | mg/l | 80.0-120 | 112 | | | |
| **Duplicate** | **0970497-DUP1** | | **P709296-01** | | | | | | | |
| Zinc | 10/7/97 | | 0.672 | 0.692 | mg/l | | | 20.0 | 2.93 | |
| **Matrix Spike** | **0970497-MS1** | | **P709296-01** | | | | | | | |
| Zinc | 10/7/97 | 0.500 | 0.672 | 1.28 | mg/l | 75.0-125 | 122 | | | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

Mary A. Fritzmann Smith, Project Manager



SCOEPA00035523

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | None Provided | Sampled: 9/16/97 |
| 7200 N.W. Front | Project Number: | 97-199 | Received: 9/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 10/8/97 12:40 |

**Notes and Definitions**

| # | Note |
|---|---|
| 1 | The reporting limit for this analyte was raised due to matrix interference. |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| Recov. | Recovery |
| RPD | Relative Percent Difference |

North Creek Analytical, Inc.

Mary A. Fritzmann Smith, Project Manager



SCOEPA00035524

# CITY OF PORTLAND
# ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE
## CONTINUOUS pH SELF-MONITORING REPORT (SMR)

INDUSTRY NAME: Wacker Siltronic Corp.

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** **OCTOBER 15,**

SAMPLING PERIOD: SEPTEMBER

TODAY'S DATE: 9 Oct 97

REPORT TYPE (CHECK ONE):

BASELINE MONITORING

X PERIODIC COMPLIANCE

SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH Excursions | | SU | | Y N | | **pH Sample Code: 843** |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

File; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 October 1997

SAMPLING PERIOD: September 1997

TODAY'S DATE: 9 October 1997

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | Sep 1997 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 17 Sep 97 | DATE OF SAMPLE ANAL. > | 23 Sep 97 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | < 0.001 | 0.3 | | No | DATE: |
| Cadmium | 736 | < 0.001 | 0.7 | | No | DATE: |
| Chromium | 748 | ~~0.001~~ 0.004 | 3.8 | | No | DATE: |
| Copper | 752 | ~~0.21~~ 0.217 | 2.3 | | No | DATE: |
| Lead | 811 | 0.001 | 0.7 | | No | DATE: |
| Nickel | 824 | 0.009 | 3.0 | | No | DATE: |
| Mercury | 813 | 0.0009 | 0.14 | | No | DATE: |
| Zinc | 874 | 0.063 | 4.0 | | No | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| Split with City of Portland | | | | | | DATE: |
| | | | | | | DATE: |
| | | on 16 Sep 97 | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

form 13-1A.fil
rev 6/24/94

SCOEPA00035526

WACKER
Wacker Siltronic Corporation

September 11, 1997 ER36:ES

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the August Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035527

E. Spiering MS 30

Z 282 748 061

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to TIM DEAN BUR. OF ENVIR. SERV | |
| Street & Number 6543 N. BURLINGTON AVE | |
| Post Office, State, & ZIP Code PORTLAND, OR. 97203-5452 | |
| Postage | $ 55 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 3.00 |
| Postmark or Date | |

PS Form **3800**, April 1995

PORTLAND, OR. SAINT JOHNS STA.

SEP 10 1997

USPS

SCOEPA00035528

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUR. OF ENVIRON. SERV
6543 N. BURLINGTON AV
PORTLAND, OR. 97203-5452

4a. Article Number

Z 282 . 748 . 061

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

12 Sep 97

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*

X Nichole Wickliff

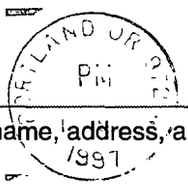
PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SCOEPA00035529

UNITED STATES POSTAL SERVICE



First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

o Print your name, address, and ZIP Code in this box o

Eric Spiering M/S30

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

# CITY OF PORTLAND
# ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE
## CONTINUOUS pH SELF-MONITORING REPORT (SMR)

DUSTRY NAME: Wacker Siltronic Corp.

:RMIT NUMBER: 469-001

EPORT DUE DATE: SEPTEMBER 15, 1997

\MPLING PERIOD: AUGUST 1997

)DAY'S DATE: SEPTEMBER 10, 1997

REPORT TYPE (CHECK ONE):

BASELINE MONITORING

X PERIODIC COMPLIANCE

SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH Excursions | : | SU | | Y N | | **pH Sample Code: 843** |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified ersonnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for athering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for ubmitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

ignature: Thomas C. McCune Date: September 10, 1997

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

NSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

/IOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

:LAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

'ile; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

SCOEPA00035531

WACKER
Wacker Siltronic Corporation

August 14, 1997 ER32:ES

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the July Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035532

Eric Spiering M/S30
P 494 544 993

US Postal Service
**Receipt for Certified Mail**
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to<br>Tim Dean - Pur Env Serv | |
| Street & Number<br>6543 N. Burlington Ave | |
| Post Office, State, & ZIP Code<br>Portland, Or 97203-5452 | |
| Postage | $ 55 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 3.00 |
| Postmark or Date | |

PS Form **3800**, April 1995

PORTLAND OR SAINT JOHNS STA
AUG 14 1997
USPS

SCOEPA00035533

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
TIM DEAN
BUREAU ENVIRONMENT SERV
6543 N. BURLINGTON AVE.
PORTLAND, OR 97203-5452

4a. Article Number
P 494 . 544 . 993

4b. Service Type
☐ Registered ☐ Certified
☒ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
8/13/97

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X Michele Wickliff

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

SCOEPA00035534

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

o Print your name, address, and ZIP Code in this box o

ERIC SPIERING M/S 30
WACKER SILTRONIC
P.O. BOX 83180
PORTLAND, OR. 97283

# CITY OF PORTLAND
# ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE
## CONTINUOUS pH SELF-MONITORING REPORT (SMR)

NDUSTRY NAME: Wacker Siltronic Corp.

'ERMIT NUMBER: 469-001

REPORT DUE DATE: AUGUST 15, 1997

SAMPLING PERIOD: JULY 1997

TODAY'S DATE: _____

REPORT TYPE (CHECK ONE):

BASELINE MONITORING

X PERIODIC COMPLIANCE

SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No | pH Excursions | SU | | Y N | | **pH Sample Code: 843** |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP BY:

Signature: _____ Date: August 14, 1997

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

File; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

WACKER
Wacker Siltronic Corporation

July 11, 1997 ER30:ES

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the June Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035537

Eric Spearing MS/30
P 494 544 958

US Postal Service
**Receipt for Certified Mail**
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to Tim Dean | |
| Street & Number 6543 N. Burlington Ave | |
| Post Office, State, & ZIP Code Portland, OR 97203 | |
| Postage | $ .78 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 3.23 |
| Postmark or Date | |

PS Form **3800**, April 1995

SCOEPA00035538

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Ave
Portland, OR 97203

4a. Article Number
P494 544 958

4b. Service Type
☐ Registered ☐ Insured
☑ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
7/14/97

5. Signature (Addressee)

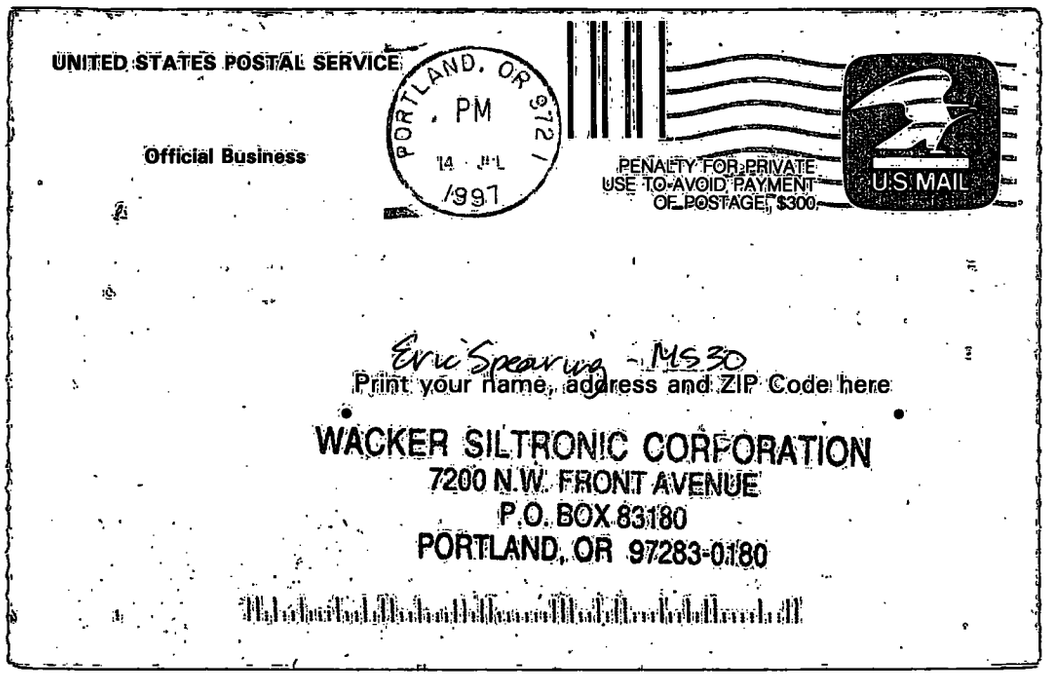
8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)
D. C. Peschke

PS Form 3811, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

SCOEPA00035539


UNITED STATES POSTAL SERVICE
Official Business
PORTLAND, OR 972
PM
14 JUL
1997
PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, $300
U.S. MAIL
Eric Spearing - MS 30
Print your name, address and ZIP Code here
WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

# CITY OF PORTLAND
# ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE
## SELF-MONITORING REPORT (SMR)

NDUSTRY NAME: WACKER SILTRONIC CORP.

ERMIT NUMBER: 469-001

EPORT DUE DATE: JULY 15, 1997

AMPLING PERIOD: JUNE 1997

ODAY'S DATE: July 9, 1997

REPORT TYPE (CHECK ONE):

BASELINE MONITORING

X PERIODIC COMPLIANCE

FINAL COMPLIANCE

* * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * *

| SAMPLE DATE | June 1997 | SAMPLE LOCATION | Fab 2 Pipe | SAMPLE TYPE | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB | | DATE OF SAMPLE ANALYSIS | |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT in mg/L Daily | LIMIT in mg/L Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic (Total) | 710 | <0.001 | 0.3 | | No | |
| Cadmium (Total) | 736 | <0.001 | 0.7 | | No | |
| Copper (Total) | 752 | 0.217 | 2.3 | | No | |
| Chromium (Total) | 748 | 0.007 | 3.8 | | No | |
| Lead (Total) | 811 | 0.002 | 0.7 | | No | |
| Nickel (Total) | 824 | 0.014 | 3.0 | | No | |
| Mercury (Total) | 813 | <0.001 | .014 | | No | |
| Zinc (Total) | 874 | 0.124 | 4.0 | | No | |
| | | | | | | |
| Total Toxic Organics (No analysis required | 858 | < 0.01 | 1.37 | | No | TTO CERTIFICATION (See Statement Below |
| pH | 843 | No excursions | 5.5-11.5 | | | See monthly data |
| | | | | | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

"Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation (or pretreatment standard) for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no discharge of toxic organics into the wastewaters in excess of the TTO limit has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting (or control) authority."

Signature: Thomas C. McCue Date: 7/11/97

File: S:\IU-W\WACKER\INSP-MON\97SASMR.DOC

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 6/3/97 to 6/5/97 |
| 7200 N.W. Front | Project Number: | 97-135 | Received: 6/5/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/19/97 19:36 |

**Total Metals per EPA 200 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **97-137** | | | **P706085-03** | | | | **Water** | |
| **Chromium** | 0670212 | 6/10/97 | 6/11/97 | EPA 200.8 | 0.00100 | **0.00392** | mg/l | |
| **97-141** | | | **P706085-07** | | | | **Water** | |
| Arsenic | 0670212 | 6/10/97 | 6/11/97 | EPA 200.8 | 0.00100 | ND | mg/l | |
| Cadmium | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| **Chromium** | " | " | " | EPA 200.8 | 0.00100 | **0.00710** | " | |
| **Copper** | " | " | " | EPA 200.8 | 0.00200 | **0.217** | " | |
| **Lead** | " | " | " | EPA 200.8 | 0.00100 | **0.00157** | " | |
| **Nickel** | " | " | " | EPA 200.8 | 0.00200 | **0.0144** | " | |
| Silver | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| **Zinc** | " | " | " | EPA 200.8 | 0.00500 | **0.124** | " | |
| Mercury | 0670227 | 6/11/97 | 6/12/97 | EPA 245.1 | 0.000420 | ND | " | 1 |



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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 6/3/97 to 6/5/97 |
| 7200 N.W. Front | Project Number: | 97-135 | Received: 6/5/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/19/97 19:36 |

## Volatile Organic Compounds by EPA Method 8240B
## North Creek Analytical - Bothell

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **97-135** | | | **P706085-01** | | | | **Water** | |
| **Acetone** | 0670537 | 6/17/97 | 6/17/97 | | 10.0 | **1060** | ug/l | |
| Benzene | " | " | " | | 1.00 | ND | " | |
| Bromodichloromethane | " | " | " | | 1.00 | ND | " | |
| Bromoform | " | " | " | | 1.00 | ND | " | |
| Bromomethane | " | " | " | | 1.00 | ND | " | |
| **2-Butanone** | " | " | " | | 10.0 | **10.8** | " | |
| Carbon disulfide | " | " | " | | 1.00 | ND | " | |
| Carbon tetrachloride | " | " | " | | 1.00 | ND | " | |
| Chlorobenzene | " | " | " | | 1.00 | ND | " | |
| Chloroethane | " | " | " | | 1.00 | ND | " | |
| **Chloroform** | " | " | " | | 1.00 | **4.42** | " | |
| **Chloromethane** | " | " | " | | 1.00 | **3.10** | " | |
| Dibromochloromethane | " | " | " | | 1.00 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 1.00 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 1.00 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 1.00 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 1.00 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 1.00 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 1.00 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 1.00 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 1.00 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 1.00 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 1.00 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 1.00 | ND | " | |
| Ethylbenzene | " | " | " | | 1.00 | ND | " | |
| 2-Hexanone | " | " | " | | 10.0 | ND | " | |
| Methylene chloride | " | " | " | | 5.00 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 10.0 | ND | " | |
| Styrene | " | " | " | | 1.00 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 1.00 | ND | " | |
| Tetrachloroethene | " | " | " | | 1.00 | ND | " | |
| Toluene | " | " | " | | 1.00 | ND | " | |
| 1,1,1-Trichloroethane | " | " | " | | 1.00 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 1.00 | ND | " | |
| Trichloroethene | " | " | " | | 1.00 | ND | " | |
| Vinyl chloride | " | " | " | | 1.00 | ND | " | |
| Xylenes (total) | " | " | " | | 2.00 | ND | " | |
| *Surrogate: 2-Bromopropene* | " | " | " | *80.0-120* | | *97.5* | % | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

S Wright

Sandra K. Wright, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776



SCOEPA00035543

NORTH CREEK ANALYTICAL
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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 6/3/97 to 6/5/97 |
| 7200 N.W. Front | Project Number: | 97-135 | Received: 6/5/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/19/97 19:36 |

**Volatile Organic Compounds by EPA Method 8240B**
**North Creek Analytical - Bothell**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **97-135 (continued)** | | | **P706085-01** | | | | **Water** | |
| *Surrogate: 1,2-DCA-d4* | *0670537* | *6/17/97* | *6/17/97* | *80.0-120* | | *102* | *%* | |
| *Surrogate: Toluene-d8* | " | " | " | *80.0-120* | | *99.5* | " | |
| *Surrogate: 4-BFB* | " | " | " | *80.0-120* | | *97.5* | " | |

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|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 6/3/97 to 6/5/97 |
| 7200 N.W. Front | Project Number: | 97-135 | Received: 6/5/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/19/97 19:36 |

## Total Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0670212** | **Date Prepared: 6/10/97** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **0670212-BLK1** | | | | | | | | | |
| Arsenic | 6/11/97 | | | **ND** | mg/l | **0.00100** | | | | |
| Cadmium | " | | | **ND** | " | **0.00100** | | | | |
| Chromium | " | | | **ND** | " | **0.00100** | | | | |
| Copper | " | | | **ND** | " | **0.00200** | | | | |
| Lead | " | | | **ND** | " | **0.00100** | | | | |
| Nickel | " | | | **ND** | " | **0.00200** | | | | |
| Silver | 6/12/97 | | | **ND** | " | **0.00100** | | | | |
| Zinc | 6/11/97 | | | **ND** | " | **0.00500** | | | | |
| **LCS** | **0670212-BS1** | | | | | | | | | |
| Arsenic | 6/11/97 | 0.100 | | 0.0935 | mg/l | 85.0-115 | 93.5 | | | |
| Cadmium | " | 0.100 | | 0.0943 | " | 85.0-115 | 94.3 | | | |
| Chromium | " | 0.100 | | 0.100 | " | 85.0-115 | 100 | | | |
| Copper | " | 0.100 | | 0.103 | " | 85.0-115 | 103 | | | |
| Lead | " | 0.100 | | 0.0967 | " | 85.0-115 | 96.7 | | | |
| Nickel | " | 0.100 | | 0.104 | " | 85.0-115 | 104 | | | |
| Silver | " | 0.0500 | | 0.0482 | " | 85.0-115 | 96.4 | | | |
| Zinc | " | 0.100 | | 0.0972 | " | 80.0-110 | 97.2 | | | |
| **Duplicate** | **0670212-DUP1** | | **P706085-03** | | | | | | | |
| Arsenic | 6/11/97 | | ND | ND | mg/l | | | 20.0 | | |
| Cadmium | " | | ND | ND | " | | | 20.0 | | |
| Chromium | " | | 0.00392 | 0.00393 | " | | | 20.0 | **0.255** | 2 |
| Copper | " | | 0.0189 | 0.0187 | " | | | 20.0 | **1.06** | |
| Lead | " | | ND | ND | " | | | 20.0 | | |
| Nickel | " | | 0.00276 | 0.00271 | " | | | 20.0 | **1.83** | 2 |
| Silver | " | | ND | ND | " | | | 20.0 | | |
| Zinc | " | | ND | ND | " | | | 20.0 | | |
| **Matrix Spike** | **0670212-MS1** | | **P706085-03** | | | | | | | |
| Arsenic | 6/11/97 | 0.100 | ND | 0.0991 | mg/l | 70.0-130 | **99.1** | | | |
| Cadmium | " | 0.100 | ND | 0.0924 | " | 70.0-130 | **92.4** | | | |
| Chromium | " | 0.100 | 0.00392 | 0.114 | " | 70.0-130 | **110** | | | |
| Copper | " | 0.100 | 0.0189 | 0.125 | " | 70.0-130 | **106** | | | |
| Lead | " | 0.100 | ND | 0.0912 | " | 70.0-130 | **91.2** | | | |
| Nickel | " | 0.100 | 0.00276 | 0.109 | " | 70.0-130 | **106** | | | |
| Silver | " | 0.0500 | ND | 0.0469 | " | 70.0-130 | **93.8** | | | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

S. Wright

Sandra K. Wright, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776



SCOEPA00035545

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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 6/3/97 to 6/5/97 |
| 7200 N.W. Front | Project Number: | 97-135 | Received: 6/5/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/19/97 19:36 |

## Total Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Matrix Spike (continued)** | **0670212-MS1** | | **P706085-03** | | | | | | | |
| Zinc | 6/11/97 | 0.100 | ND | 0.0954 | mg/l | 70.0-130 | **95.4** | | | |
| **Batch: 0670227** | **Date Prepared: 6/11/97** | | | | | **Extraction Method: Metals** | | | | |
| **Blank** | **0670227-BLK1** | | | | | | | | | |
| Mercury | 6/12/97 | | | **ND** | mg/l | **0.000200** | | | | |
| **LCS** | **0670227-BS1** | | | | | | | | | |
| Mercury | 6/12/97 | 0.00500 | | 0.00520 | mg/l | 85.0-115 | 104 | | | |
| **Duplicate** | **0670227-DUP1** | | **P705431-01** | | | | | | | |
| Mercury | 6/12/97 | | ND | ND | mg/l | | | 20.0 | | |
| **Matrix Spike** | **0670227-MS1** | | **P705431-01** | | | | | | | |
| Mercury | 6/12/97 | 0.00500 | ND | 0.00550 | mg/l | 75.0-125 | **110** | | | |
| **Matrix Spike** | **0670227-MS2** | | **P705437-33** | | | | | | | |
| Mercury | 6/12/97 | 0.00500 | ND | 0.00530 | mg/l | 75.0-125 | **106** | | | |

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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 6/3/97 to 6/5/97 |
| 7200 N.W. Front | Project Number: | 97-135 | Received: 6/5/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/19/97 19:36 |

## Volatile Organic Compounds by EPA Method 8240B/Quality Control
## North Creek Analytical - Bothell

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0670537** | **Date Prepared: 6/17/97** | | | | **Extraction Method: EPA 5030** | | | | | |
| **Blank** | **0670537-BLK1** | | | | | | | | | |
| Acetone | 6/17/97 | | | ND | ug/l | 10.0 | | | | |
| Benzene | " | | | ND | " | 1.00 | | | | |
| Bromodichloromethane | " | | | ND | " | 1.00 | | | | |
| Bromoform | " | | | ND | " | 1.00 | | | | |
| Bromomethane | " | | | ND | " | 1.00 | | | | |
| 2-Butanone | " | | | ND | " | 10.0 | | | | |
| Carbon disulfide | " | | | ND | " | 1.00 | | | | |
| Carbon tetrachloride | " | | | ND | " | 1.00 | | | | |
| Chlorobenzene | " | | | ND | " | 1.00 | | | | |
| Chloroethane | " | | | ND | " | 1.00 | | | | |
| Chloroform | " | | | ND | " | 1.00 | | | | |
| Chloromethane | " | | | ND | " | 1.00 | | | | |
| Dibromochloromethane | " | | | ND | " | 1.00 | | | | |
| 1,2-Dichlorobenzene | " | | | ND | " | 1.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 1.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 1.00 | | | | |
| 1,1-Dichloroethane | " | | | ND | " | 1.00 | | | | |
| 1,2-Dichloroethane | " | | | ND | " | 1.00 | | | | |
| 1,1-Dichloroethene | " | | | ND | " | 1.00 | | | | |
| cis-1,2-Dichloroethene | " | | | ND | " | 1.00 | | | | |
| trans-1,2-Dichloroethene | " | | | ND | " | 1.00 | | | | |
| 1,2-Dichloropropane | " | | | ND | " | 1.00 | | | | |
| cis-1,3-Dichloropropene | " | | | ND | " | 1.00 | | | | |
| trans-1,3-Dichloropropene | " | | | ND | " | 1.00 | | | | |
| Ethylbenzene | " | | | ND | " | 1.00 | | | | |
| 2-Hexanone | " | | | ND | " | 10.0 | | | | |
| Methylene chloride | " | | | ND | " | 5.00 | | | | |
| 4-Methyl-2-pentanone | " | | | ND | " | 10.0 | | | | |
| Styrene | " | | | ND | " | 1.00 | | | | |
| 1,1,2,2-Tetrachloroethane | " | | | ND | " | 1.00 | | | | |
| Tetrachloroethene | " | | | ND | " | 1.00 | | | | |
| Toluene | " | | | ND | " | 1.00 | | | | |
| 1,1,1-Trichloroethane | " | | | ND | " | 1.00 | | | | |
| 1,1,2-Trichloroethane | " | | | ND | " | 1.00 | | | | |
| Trichloroethene | " | | | ND | " | 1.00 | | | | |
| Vinyl chloride | " | | | ND | " | 1.00 | | | | |
| Xylenes (total) | " | | | ND | " | 2.00 | | | | |

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|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 6/3/97 to 6/5/97 |
| 7200 N.W. Front | Project Number: | 97-135 | Received: 6/5/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 6/19/97 19:36 |

## Volatile Organic Compounds by EPA Method 8240B/Quality Control
## North Creek Analytical - Bothell

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **0670537-BLK1** | | | | | | | | | |
| *Surrogate: 2-Bromopropene* | *6/17/97* | *20.0* | | *19.7* | *ug/l* | *80.0-120* | *98.5* | | | |
| *Surrogate: 1,2-DCA-d4* | " | *20.0* | | *20.3* | " | *80.0-120* | *101* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.9* | " | *80.0-120* | *99.5* | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.5* | " | *80.0-120* | *97.5* | | | |
| **LCS** | **0670537-BS1** | | | | | | | | | |
| Benzene | 6/17/97 | 10.0 | | 10.5 | ug/l | 80.0-120 | 105 | | | |
| Chlorobenzene | " | 10.0 | | 10.0 | " | 80.0-120 | 100 | | | |
| 1,1-Dichloroethene | " | 10.0 | | 10.5 | " | 80.0-120 | 105 | | | |
| Toluene | " | 10.0 | | 10.6 | " | 80.0-120 | 106 | | | |
| Trichloroethene | " | 10.0 | | 10.5 | " | 80.0-120 | 105 | | | |
| *Surrogate: 2-Bromopropene* | " | *20.0* | | *19.5* | " | *80.0-120* | *97.5* | | | |
| *Surrogate: 1,2-DCA-d4* | " | *20.0* | | *18.9* | " | *80.0-120* | *94.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.5* | " | *80.0-120* | *103* | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.9* | " | *80.0-120* | *99.5* | | | |
| **Matrix Spike** | **0670537-MS1** | | **B706207-01** | | | | | | | |
| Benzene | 6/17/97 | 10.0 | ND | 10.6 | ug/l | 80.0-120 | **106** | | | |
| Chlorobenzene | " | 10.0 | ND | 10.3 | " | 80.0-120 | **103** | | | |
| 1,1-Dichloroethene | " | 10.0 | ND | 10.2 | " | 80.0-120 | **102** | | | |
| Toluene | " | 10.0 | ND | 10.3 | " | 80.0-120 | **103** | | | |
| Trichloroethene | " | 10.0 | ND | 10.4 | " | 80.0-120 | **104** | | | |
| *Surrogate: 2-Bromopropene* | " | *20.0* | | *19.3* | " | *80.0-120* | *96.5* | | | |
| *Surrogate: 1,2-DCA-d4* | " | *20.0* | | *20.6* | " | *80.0-120* | *103* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.9* | " | *80.0-120* | *99.5* | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.6* | " | *80.0-120* | *98.0* | | | |
| **Matrix Spike Dup** | **0670537-MSD1** | | **B706207-01** | | | | | | | |
| Benzene | 6/17/97 | 10.0 | ND | 10.9 | ug/l | 80.0-120 | **109** | 15.0 | **2.79** | |
| Chlorobenzene | " | 10.0 | ND | 10.5 | " | 80.0-120 | **105** | 15.0 | **1.92** | |
| 1,1-Dichloroethene | " | 10.0 | ND | 10.5 | " | 80.0-120 | **105** | 15.0 | **2.90** | |
| Toluene | " | 10.0 | ND | 10.6 | " | 80.0-120 | **106** | 15.0 | **2.87** | |
| Trichloroethene | " | 10.0 | ND | 10.6 | " | 80.0-120 | **106** | 15.0 | **1.90** | |
| *Surrogate: 2-Bromopropene* | " | *20.0* | | *19.2* | " | *80.0-120* | *96.0* | | | |
| *Surrogate: 1,2-DCA-d4* | " | *20.0* | | *20.6* | " | *80.0-120* | *103* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.8* | " | *80.0-120* | *99.0* | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.7* | " | *80.0-120* | *98.5* | | | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

S. Wright

Sandra K. Wright, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035548

# CITY OF PORTLAND
# ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE
## SELF-MONITORING REPORT (SMR)

INDUSTRY NAME: WACKER SILTRONIC CORP.

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** JULY 15, 1997

SAMPLING PERIOD: JUNE 1997

TODAY'S DATE: 9 July 1997

REPORT TYPE (CHECK ONE):

BASELINE MONITORING

X PERIODIC COMPLIANCE

FINAL COMPLIANCE

*****************
(For City Use Only)
*****************

| SAMPLE DATE | June 1997 | SAMPLE LOCATION | Fab 2 Pipe | SAMPLE TYPE | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB | | DATE OF SAMPLE ANALYSIS | |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT in mg/L Daily | LIMIT in mg/L Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic (Total) | 710 | < 0.001 | 0.3 | | No | |
| Cadmium (Total) | 736 | < 0.001 | 0.7 | | No | |
| Copper (Total) | 752 | 0.217 | 2.3 | | No | |
| Chromium (Total) | 748 | 0.007 | 3.8 | | No | |
| Lead (Total) | 811 | 0.002 | 0.7 | | No | |
| Nickel (Total) | 824 | 0.014 | 3.0 | | No | |
| Mercury (Total) | 813 | <0.001 | .014 | | No | |
| Zinc (Total) | 874 | 0.124 | 4.0 | | No | |
| | | | | | | |
| Total Toxic Organics (No analysis required | 858 | < 0.01 | 1.37 | | No | TTO CERTIFICATION (See Statement Below |
| pH | 843 | No Excursions | 5.5-11.5 | | | See monthly data |
| | | | | | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

"Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation (or pretreatment standard) for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no discharge of toxic organics into the wastewaters in excess of the TTO limit has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting (or control) authority."

Signature: _____ Date: _____

File: S:\IU-W\WACKER\INSP-MON\97SASMR.DOC

WACKER
Wacker Siltronic Corporation

June 9, 1997 ER27:ES

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the May Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035550

Spiering
MS30 P 494 544 920

US Postal Service
**Receipt for Certified Mail**
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to TIM DEAN
BUR. ENVIRONMENTAL SERV
Street & Number
6543 N. BURLINGTON AVE.
Post Office, State, & ZIP Code
PORTLAND, OR. 97203-5452

| | |
|---|---|
| Postage | $ .55 |
| Certified Fee | 1.35 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| **TOTAL** Postage & Fees | $ 3.00 |
| Postmark or Date | JUN 10 1997 |

PS Form 3800, April 1995

USPS

SCOEPA00035551

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUREAU OF ENVIRONMENTAL SERV.
6543 N. BURLINGTON AVE
PORTLAND, OR. 97203-5452

4a. Article Number

P 494 544 920

4b. Service Type

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

6/11/97

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

SCOEPA00035552

UNITED STATES POSTAL SERVICE

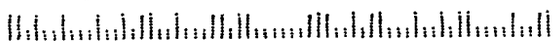
Official Business

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, $300

Eric Spiering MS 30

Print your name, address and ZIP Code here

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180



# CITY OF PORTLAND
# ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE
## CONTINUOUS pH SELF-MONITORING REPORT (SMR)

'USTRY NAME: Wacker Siltronic Corp.

:MIT NUMBER: 469-001

'ORT DUE DATE: JUNE 15, 1997

MPLING PERIOD: MAY 1997

DAY'S DATE: June 9, 1997

REPORT TYPE (CHECK ONE):

BASELINE MONITORING

X PERIODIC COMPLIANCE

SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * *

| AMPLE OCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|
| No | pH Excursions | SU | | Y N | | **pH Sample Code: 843** |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |

ertify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified sonnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for thering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for omitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

gnature: Thomas C. McCue Date: June 9, 1997

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

STRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

OLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

AIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

le: S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

SCOEPA00035554

# CITY OF PORTLAND ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE
## CONTINUOUS pH SELF-MONITORING REPORT (SMR)

INDUSTRY NAME: Wacker Siltronic Corp.
PERMIT NUMBER: 469-001
**REPORT DUE DATE:** JUNE 15, 1997
SAMPLING PERIOD: MAY 1997
TODAY'S DATE: June 9, 1997

REPORT TYPE (CHECK ONE):
BASELINE MONITORING
X PERIODIC COMPLIANCE
SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * *

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No | pH Excursions | SU | | Y N | | pH Sample Code: 843 |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: ______________________ Date: ______________

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

File; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

WACKER
Wacker Siltronic Corporation

May 8, 1997 ER25:ES

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the April Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

for

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035556

Erie Spiering MS 30
P 494 544 865

US Postal Service
**Receipt for Certified Mail**
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to TIM DEAN BUREAU OF ENVIRON. SERV | |
| Street & Number 6543 N. BURLINGTON AVE. | |
| Post Office, State, & ZIP Code PORTLAND, OR. 97203-5452 | |
| Postage | $ .55 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 2.75 |
| Postmark or Date | |

PS Form **3800**, April 1995

PORTLAND, OR SAINT JOHNS STA
SEP 9 1997
USPS

SCOEPA00035557

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUREAU OF ENVIRONMENTAL
6543 N. BURLINGTON SERV.
PORTLAND, OR. 97203-5452

4a. Article Number

P494.544.865

4b. Service Type

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

5-12-97

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Heayoung Man

PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

SCOEPA00035558

UNITED STATES POSTAL SERVICE

Official Business

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300

U.S. MAIL

Eric Spiering MS 30

Print your name, address and ZIP Code here

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

CITY OF PORTLAND
ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

# INDUSTRIAL WASTEWATER DISCHARGE
# CONTINUOUS pH SELF-MONITORING REPORT (SMR)

| | | | |
|---|---|---|---|
| USTRY NAME: | Wacker Siltronic Corp. | REPORT TYPE (CHECK ONE): | ********** (For City Use Only) |
| MIT NUMBER: | 469-001 | BASELINE MONITORING | |
| PORT DUE DATE: | MAY 15, 1997 | X PERIODIC COMPLIANCE | |
| MPLING PERIOD: | APRIL 1997 | SPECIAL COMPLIANCE | |
| DAY'S DATE: | May 7, 1997 | | ********** |

| AMPLE OCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|
| No pH Ex | cursions | SU | | Y N | | pH Sample Code: 843 |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
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| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |
| | : | SU | | Y N | | |

ertify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified rsonnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for thering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for bmitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP, BY:

gnature: [signature] Date: May 9, 1997

**********

ISTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

IOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

LAIMED NON-VIOLATIONS:
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ile; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

NDUSTRY NAME: Wacker Siltronic Corporation

ERMIT NUMBER: 469-001

EPORT DUE DATE: May 15, 1997

AMPLING PERIOD: May 07, 1997

ODAY'S DATE: May 07, 1997

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | Apr 10, 1997 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | ~~XX COMPOSITE~~ XX GRAB | DATE RECEIVED AT LAB > | Apr 10, 1997 | DATE OF SAMPLE ANAL. > | Apr 29, 1997 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organ- | | | | | | DATE: |
| ics | 858 | <0.6 | 1.37 | - | NO | DATE: Apr 10, 1997 |
| | | | | | | DATE: |
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ertify under penalty of law that this document and all attachments were prepared under my direction or supervision accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information mitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, l complete. I am aware that there are significant penalties for submitting false information, including the sibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY;

nature: _____ Date: May 9, 1997

13-1A.fil
6/24/94

SCOEPA00035561

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 4/10/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 4/10/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/29/97 14:10 |

## Volatile Organic Compounds per EPA Method 8240B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 97-95 | | | P704160-06 | | | | Water | 2 |
| **Acetone** | 0470534 | 4/18/97 | 4/19/97 | | 625 | **898** | ug/l | |
| Acrolein | " | " | " | | 5000 | ND | " | |
| Acrylonitrile | " | " | " | | 250 | ND | " | |
| Benzene | " | " | " | | 50.0 | ND | " | |
| Bromodichloromethane | " | " | " | | 50.0 | ND | " | |
| Bromoform | " | " | " | | 50.0 | ND | " | |
| Bromomethane | " | " | " | | 250 | ND | " | 1 |
| 2-Butanone | " | " | " | | 625 | ND | " | |
| Carbon disulfide | " | " | " | | 50.0 | ND | " | |
| Carbon tetrachloride | " | " | " | | 50.0 | ND | " | |
| Chlorobenzene | " | " | " | | 50.0 | ND | " | |
| Chloroethane | " | " | " | | 250 | ND | " | |
| Chloroform | " | " | " | | 50.0 | ND | " | |
| Chloromethane | " | " | " | | 250 | ND | " | |
| Dibromochloromethane | " | " | " | | 50.0 | ND | " | |
| Dibromomethane | " | " | " | | 50.0 | ND | " | |
| 1,4-Dichloro-2-butene | " | " | " | | 250 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 50.0 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 50.0 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 50.0 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 125 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 50.0 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 50.0 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 50.0 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 50.0 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 50.0 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 50.0 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 50.0 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 50.0 | ND | " | |
| Ethyl Methacrylate | " | " | " | | 50.0 | ND | " | |
| Ethylbenzene | " | " | " | | 50.0 | ND | " | |
| 2-Hexanone | " | " | " | | 125 | ND | " | |
| Iodomethane | " | " | " | | 125 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 125 | ND | " | |
| Methylene chloride | " | " | " | | 125 | ND | " | |
| Styrene | " | " | " | | 50.0 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 50.0 | ND | " | |
| Tetrachloroethene | " | " | " | | 50.0 | ND | " | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035562

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 4/10/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 4/10/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/29/97 14:10 |

## Volatile Organic Compounds per EPA Method 8240B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **97-95 (continued)** | | | **P704160-06** | | | | **Water** | **2** |
| Toluene | 0470534 | 4/18/97 | 4/19/97 | | 50.0 | ND | ug/l | |
| 1,1,1-Trichloroethane | " | " | " | | 50.0 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 50.0 | ND | " | |
| Trichloroethene | " | " | " | | 50.0 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 50.0 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 50.0 | ND | " | |
| Vinyl Acetate | " | " | " | | 125 | ND | " | |
| Vinyl chloride | " | " | " | | 125 | ND | " | |
| Xylenes (total) | " | " | " | | 50.0 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *86.0-115* | | *93.0* | *%* | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *86.0-118* | | *97.8* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *88.0-110* | | *93.6* | " | |

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 4/10/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 4/10/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/29/97 14:10 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0470534** | **Date Prepared: 4/18/97** | | | | | **Extraction Method: GC/MS Volatiles** | | | | |
| **Blank** | **0470534-BLK1** | | | | | | | | | |
| Acetone | 4/18/97 | | | ND | ug/l | 25.0 | | | | |
| Acrolein | " | | | ND | " | 200 | | | | |
| Acrylonitrile | " | | | ND | " | 10.0 | | | | |
| Benzene | " | | | ND | " | 2.00 | | | | |
| Bromodichloromethane | " | | | ND | " | 2.00 | | | | |
| Bromoform | " | | | ND | " | 2.00 | | | | |
| Bromomethane | " | | | ND | " | 10.0 | | | | 1 |
| 2-Butanone | " | | | ND | " | 25.0 | | | | |
| Carbon disulfide | " | | | ND | " | 2.00 | | | | |
| Carbon tetrachloride | " | | | ND | " | 2.00 | | | | |
| Chlorobenzene | " | | | ND | " | 2.00 | | | | |
| Chloroethane | " | | | ND | " | 10.0 | | | | |
| Chloroform | " | | | ND | " | 2.00 | | | | |
| Chloromethane | " | | | ND | " | 10.0 | | | | |
| Dibromochloromethane | " | | | ND | " | 2.00 | | | | |
| Dibromomethane | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichloro-2-butene | " | | | ND | " | 10.0 | | | | |
| 1,2-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| Dichlorodifluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,1-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| cis-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| trans-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloropropane | " | | | ND | " | 2.00 | | | | |
| cis-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| trans-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| Ethyl Methacrylate | " | | | ND | " | 2.00 | | | | |
| Ethylbenzene | " | | | ND | " | 2.00 | | | | |
| 2-Hexanone | " | | | ND | " | 5.00 | | | | |
| Iodomethane | " | | | ND | " | 5.00 | | | | |
| 4-Methyl-2-pentanone | " | | | ND | " | 5.00 | | | | |
| Methylene chloride | " | | | ND | " | 5.00 | | | | |
| Styrene | " | | | ND | " | 2.00 | | | | |
| 1,1,2,2-Tetrachloroethane | " | | | ND | " | 2.00 | | | | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
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SCOEPA00035564

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 4/10/97 |
| 7200 N.W. Front | Project Number: | PO# 405748 | Received: 4/10/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/29/97 14:10 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **0470534-BLK1** | | | | | | | | | |
| Tetrachloroethene | 4/18/97 | | | **ND** | ug/l | **2.00** | | | | |
| Toluene | " | | | **ND** | " | **2.00** | | | | |
| 1,1,1-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| 1,1,2-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| Trichloroethene | " | | | **ND** | " | **2.00** | | | | |
| Trichlorofluoromethane | " | | | **ND** | " | **2.00** | | | | |
| 1,2,3-Trichloropropane | " | | | **ND** | " | **2.00** | | | | |
| Vinyl Acetate | " | | | **ND** | " | **5.00** | | | | |
| Vinyl chloride | " | | | **ND** | " | **5.00** | | | | |
| Xylenes (total) | " | | | **ND** | " | **2.00** | | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *18.5* | " | *86.0-115* | *92.5* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *18.5* | " | *86.0-118* | *92.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.6* | " | *88.0-110* | *98.0* | | | |
| **LCS** | **0470534-BS1** | | | | | | | | | |
| Benzene | 4/18/97 | 20.0 | | 19.8 | ug/l | 76.0-127 | 99.0 | | | |
| Chlorobenzene | " | 20.0 | | 18.5 | " | 75.0-130 | 92.5 | | | |
| 1,1-Dichloroethene | " | 20.0 | | 22.1 | " | 61.0-145 | 111 | | | |
| Toluene | " | 20.0 | | 19.2 | " | 76.0-125 | 96.0 | | | |
| Trichloroethene | " | 20.0 | | 19.9 | " | 71.0-120 | 99.5 | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.1* | " | *86.0-115* | *95.5* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.2* | " | *86.0-118* | *96.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.2* | " | *88.0-110* | *96.0* | | | |
| **Matrix Spike** | **0470534-MS1** | | **P704241-01** | | | | | | | |
| Benzene | 4/18/97 | 20.0 | 2.60 | 20.9 | ug/l | 76.0-127 | **91.5** | | | |
| Chlorobenzene | " | 20.0 | ND | 18.3 | " | 75.0-130 | **91.5** | | | |
| 1,1-Dichloroethene | " | 20.0 | ND | 22.0 | " | 61.0-145 | **110** | | | |
| Toluene | " | 20.0 | ND | 19.1 | " | 76.0-125 | **95.5** | | | |
| Trichloroethene | " | 20.0 | ND | 19.3 | " | 71.0-120 | **96.5** | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *18.2* | " | *86.0-115* | *91.0* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *18.8* | " | *86.0-118* | *94.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *18.6* | " | *88.0-110* | *93.0* | | | |
| **Matrix Spike Dup** | **0470534-MSD1** | | **P704241-01** | | | | | | | |
| Benzene | 4/18/97 | 20.0 | 2.60 | 18.6 | ug/l | 76.0-127 | **80.0** | 11.0 | **13.4** | 3 |
| Chlorobenzene | " | 20.0 | ND | 15.5 | " | 75.0-130 | **77.5** | 13.0 | **16.6** | 3 |
| 1,1-Dichloroethene | " | 20.0 | ND | 17.6 | " | 61.0-145 | **88.0** | 14.0 | **22.2** | 3 |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager

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9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035565

# CITY OF PORTLAND
# ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE
## CONTINUOUS pH SELF-MONITORING REPORT (SMR)

INDUSTRY NAME: Wacker Siltronic Corp.

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** MAY 15, 1997

SAMPLING PERIOD: APRIL 1997

TODAY'S DATE: 7 May 1997

REPORT TYPE (CHECK ONE):

BASELINE MONITORING

X PERIODIC COMPLIANCE

SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No | pH Excursions | SU | | Y N | | **pH Sample Code: 843** |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: _____ Date: _____

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

File: S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

SCOEPA00035566

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 May 1997

SAMPLING PERIOD: April 1997

TODAY'S DATE: 7 May 1997

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | 10 April 1997 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | ~~XX~~ COMPOSITE X GRAB | DATE RECEIVED AT LAB > | 10 Apr 1997 | DATE OF SAMPLE ANAL. > | 29 April 1997 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organics | 858 | < 0.6 | 1.37 | — | No | DATE: 10 Apr 97 |
| | | | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP BY:

Signature: _____ Date: _____

form 13-1A.fil
rev. 6/24/94

SCOEPA00035567

WACKER
Wacker Siltronic Corporation

April 17, 1997 ER17:ES

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is an Industrial Discharge Report for a sample that was split with the City of Portland on March 27, 1996. This Industrial Discharge Report is not part of our Periodic Compliance Self-monitoring Requirements, but is required per item E on page B2 of our permit number 469-00.

If you have any questions, please contact me at 219-7132.

Very truly yours,

WACKER SILTRONIC CORPORATION

Eric Spiering
Environmental Engineer

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035568

E Spierling MJ30

P 494 544 849

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to TIM DEAD BUR ENV. SERV | |
| Street & Number 6543 N. BURLINGTON AVE | |
| Post Office, State, & ZIP Code PORTLAND, OR 97203-5453 | |
| Postage | $ .55 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 2.75 |
| Postmark or Date | APR 17 1997 |

PS Form **3800**, April 1995

USPS

SCOEPA00035569

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Tim DEAN
BUREAU OF ENVIRON. SERV.
6543 N. BURLINGTON AVE
PORTLAND, OR. 97203-5452

4a. Article Number
P 494 544 849

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
4-21-97

5. Signature (Addressee)

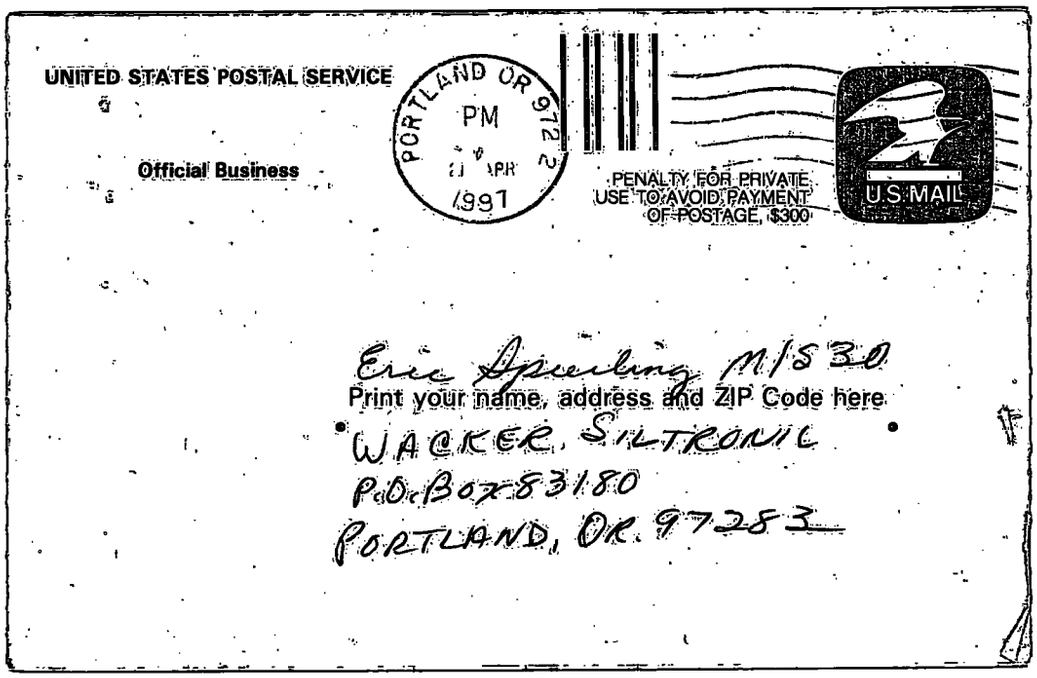
8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)
X Heayoung Mun

PS Form 3811, December 1991 ☆U.S. GPO: 1993—352-714 DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

SCOEPA00035570


UNITED STATES POSTAL SERVICE
Official Business
PORTLAND OR 972
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1991
PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300
U.S. MAIL
Eric Ayerbing M/S30
Print your name, address and ZIP Code here
WACKER SILTRONIC
P.O. Box 83180
PORTLAND, OR 97283

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** April 15, 1997

SAMPLING PERIOD: March 1997

TODAY'S DATE: April 14, 1997

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | Mar 27, 1997 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | Mar 27, 1997 | DATE OF SAMPLE ANAL. > | Apr 1 1997 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic, Total | 710 | <0.001 | 0.3 | - | No | DATE: Apr 1, 1997 |
| Cadmium, Total | 736 | <0:001 | 0.7 | - | No | DATE: Apr 1, 1997 |
| Copper, Total | 752 | 0.083 | 2.3 | - | No | DATE: Apr 1, 1997 |
| Chromium, Total | 748 | 0.0097 | 3.8 | - | No | DATE: Apr 1, 1997 |
| Lead, Total | 811 | <0.01 | 0.7 | - | No | DATE: Apr 1, 1997 |
| Nickel, Total | 824 | 0.023 | 3.0 | - | No | DATE: Apr 1, 1997 |
| Mercury, Total | 813 | 0.0004 | 0.14 | - | No | DATE: Apr 1, 1997 |
| Zinc, Total | 874 | 0.086 | 4.0 | - | No | DATE: Apr 1, 1997 |
| | | | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: _____ Date: April 14, 1997

form 13-1A.fil
rev. 6/24/94

SCOEPA00035572

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 3/26/97 to 3/27/97 |
| 7200 N.W. Front | Project Number: | P.O #405748 | Received: 3/27/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/9/97 11:26 |

**Total Metals per EPA 200 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **97-76** City of Portland Split | | | **P703444-01** | | | | **Water** | |
| Arsenic OWW | 0470006 | 3/31/97 | 4/1/97 | EPA 200.8 | 0.00100 | ND | mg/l | |
| Cadmium | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| **Chromium** | " | " | " | EPA 200.8 | 0.00100 | **0.00967** | " | |
| **Copper** | " | " | 4/3/97 | EPA 200.8 | 0.00200 | **0.0830** | " | |
| Lead | " | " | " | EPA 200.8 | 0.0100 | ND | " | 1 |
| **Nickel** | " | " | 4/1/97 | EPA 200.8 | 0.00200 | **0.0230** | " | |
| Silver | " | " | 4/3/97 | EPA 200.8 | 0.0100 | ND | " | 1 |
| **Zinc** | " | " | 4/1/97 | EPA 200.8 | 0.00500 | **0.0865** | " | |
| **Mercury** | 0370645 | " | 3/31/97 | EPA 245.1 | 0.000410 | **0.000441** | " | 1 |
| **97-77** Feb 2 CE | | | **P703444-02** | | | | **Water** | |
| **Chromium** | 0470006 | 3/31/97 | 4/3/97 | EPA 200.8 | 0.00100 | **0.00207** | mg/l | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035573

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 3/26/97 to 3/27/97 |
| 7200 N.W. Front | Project Number: | PO #405748 | Received: 3/27/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/9/97 11:26 |

## Total Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0370645** | **Date Prepared: 3/31/97** | | | | | **Extraction Method: Metals** | | | | |
| **Blank** | **0370645-BLK1** | | | | | | | | | |
| Mercury | 3/31/97 | | | **ND** | mg/l | **0.000200** | | | | |
| **LCS** | **0370645-BS1** | | | | | | | | | |
| Mercury | 3/31/97 | 0.00500 | | 0.00540 | mg/l | 85.0-115 | 108 | | | |
| **Duplicate** | **0370645-DUP1** | | **P703429-09** | | | | | | | |
| Mercury | 3/31/97 | | 0.00730 | 0.00840 | mg/l | | | 20.0 | **14.0** | |
| **Matrix Spike** | **0370645-MS1** | | **P703429-09** | | | | | | | |
| Mercury | 3/31/97 | 0.00500 | 0.00730 | 0.0136 | mg/l | 75.0-125 | **126** | | | 2 |
| **Matrix Spike** | **0370645-MS2** | | **P703468-01** | | | | | | | |
| Mercury | 3/31/97 | 0.00500 | 0.000640 | 0.00530 | mg/l | 75.0-125 | **93.2** | | | |
| **Batch: 0470006** | **Date Prepared: 3/31/97** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **0470006-BLK1** | | | | | | | | | |
| Arsenic | 4/1/97 | | | **ND** | mg/l | **0.00100** | | | | |
| Cadmium | " | | | **ND** | " | **0.00100** | | | | |
| Chromium | " | | | **ND** | " | **0.00100** | | | | |
| Copper | 4/3/97 | | | **ND** | " | **0.00200** | | | | |
| Lead | 4/1/97 | | | **ND** | " | **0.00100** | | | | |
| Nickel | " | | | **ND** | " | **0.00200** | | | | |
| Silver | 4/3/97 | | | **ND** | " | **0.00100** | | | | |
| Zinc | " | | | **ND** | " | **0.00500** | | | | |
| **LCS** | **0470006-BS1** | | | | | | | | | |
| Arsenic | 4/1/97 | 0.100 | | 0.105 | mg/l | 85.0-115 | 105 | | | |
| Cadmium | " | 0.100 | | 0.101 | " | 85.0-115 | 101 | | | |
| Chromium | " | 0.100 | | 0.106 | " | 85.0-115 | 106 | | | |
| Copper | 4/3/97 | 0.100 | | 0.0996 | " | 85.0-115 | 99.6 | | | |
| Lead | 4/1/97 | 0.100 | | 0.0944 | " | 85.0-115 | 94.4 | | | |
| Nickel | " | 0.100 | | 0.110 | " | 85.0-115 | 110 | | | |
| Silver | 4/3/97 | 0.0500 | | 0.0511 | " | 85.0-115 | 102 | | | |
| Zinc | " | 0.100 | | 0.0993 | " | 80.0-110 | 99.3 | | | |
| **Duplicate** | **0470006-DUP1** | | **P703459-01** | | | | | | | |
| Arsenic | 4/1/97 | | 0.00310 | 0.00299 | mg/l | | | 20.0 | **3.61** | 3 |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035574

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 3/26/97 to 3/27/97 |
| 7200 N.W. Front | Project Number: | PO #405748 | Received: 3/27/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 4/9/97 11:26 |

## Total Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate (continued)** | **0470006-DUP1** | | **P703459-01** | | | | | | | |
| Cadmium | 4/1/97 | | ND | ND | mg/l | | | 20.0 | | |
| Chromium | " | | 0.00281 | 0.00304 | " | | | 20.0 | **7.86** | 3 |
| Copper | 4/3/97 | | 0.0139 | 0.0139 | " | | | 20.0 | **0** | |
| Lead | 4/1/97 | | 0.00153 | 0.00121 | " | | | 20.0 | **23.4** | 3 |
| Nickel | " | | 0.00335 | 0.00335 | " | | | 20.0 | **0** | 3 |
| Silver | 4/3/97 | | ND | ND | " | | | 20.0 | | |
| Zinc | 4/1/97 | | 0.0716 | 0.0728 | " | | | 20.0 | **1.66** | |
| **Matrix Spike** | **0470006-MS1** | | **P703459-01** | | | | | | | |
| Arsenic | 4/1/97 | 0.100 | 0.00310 | 0.109 | mg/l | 70.0-130 | **106** | | | |
| Cadmium | " | 0.100 | ND | 0.100 | " | 70.0-130 | **100** | | | |
| Chromium | " | 0.100 | 0.00281 | 0.109 | " | 70.0-130 | **106** | | | |
| Copper | 4/3/97 | 0.100 | 0.0139 | 0.111 | " | 70.0-130 | **97.1** | | | |
| Lead | 4/1/97 | 0.100 | 0.00153 | 0.0937 | " | 70.0-130 | **92.2** | | | |
| Nickel | " | 0.100 | 0.00335 | 0.113 | " | 70.0-130 | **110** | | | |
| Silver | 4/3/97 | 0.0500 | ND | 0.0505 | " | 70.0-130 | **101** | | | |
| Zinc | 4/1/97 | 0.100 | 0.0716 | 0.171 | " | 70.0-130 | **99.4** | | | |
| **Matrix Spike** | **0470006-MS2** | | **P703474-04** | | | | | | | |
| Arsenic | 4/3/97 | 0.100 | ND | 0.0935 | mg/l | 70.0-130 | **93.5** | | | |
| Cadmium | 4/2/97 | 0.100 | 0.00252 | 0.102 | " | 70.0-130 | **99.5** | | | |
| Chromium | " | 0.100 | 0.00158 | 0.105 | " | 70.0-130 | **103** | | | |
| Copper | 4/3/97 | 0.100 | 0.00266 | 0.0996 | " | 70.0-130 | **96.9** | | | |
| Lead | " | 0.100 | 0.00141 | 0.0989 | " | 70.0-130 | **97.5** | | | |
| Nickel | " | 0.100 | 0.00266 | 0.0997 | " | 70.0-130 | **97.0** | | | |
| Silver | " | 0.0500 | ND | 0.0486 | " | 70.0-130 | **97.2** | | | |
| Zinc | " | 0.100 | 0.0183 | 0.111 | " | 70.0-130 | **92.7** | | | |



SCOEPA00035575

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 April 1997

SAMPLING PERIOD: March 1997

TODAY'S DATE: 14 April 1997

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | 27 Mar 1997 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > ~~27 Mar 97~~ | 27 mar 1997 | DATE OF SAMPLE ANAL. > | 1 April 1997 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic, Total | 710 | < 0.001 | 0.3 | — | No | DATE: 1 April 1997 |
| Cadmium, Total | 736 | <0.001 | 0.7 | — | No | DATE: |
| Copper, Total | 752 | 0.083 | 2.3 | — | No | DATE: |
| Chromium, Total | 748 | 0.0097 | 3.8 | — | No | DATE: |
| Lead, Total | 811 | <0.01 | 0.7 | — | No | DATE: |
| Nickel, Total | 824 | 0.023 | 3.0 | — | No | DATE: |
| Mercury, Total | 813 | 0.0004 | 0.14 | — | No | DATE: |
| Zinc, Total | 874 | 0.086 | 4.0 | — | No | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP BY:

Signature: _____ Date: _____

form 13-1A.cii
rev. 6/24/94

SCOEPA00035576

WACKER
Wacker Siltronic Corporation

April 8, 1997 ER15:ES

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the ~~February~~ March Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035577

ERIC SPIERING MS/30

P 494 544 843

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to<br>Tim Dean | |
| Street & Number<br>6543 N. Burlington Ave | |
| Post Office, State, & ZIP Code<br>Portland, OR 97203-5452 | |
| Postage | $ .78 |
| Certified Fee | 1.00 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| **TOTAL** Postage & Fees | $ 2.98 |
| Postmark or Date<br>4.9.97 | |

PS Form **3800**, April 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Ave.
Portland, OR 97203-5452

4a. Article Number

P 494 544 843

4b. Service Type

- ☒ Registered
- ☐ Insured
- ☒ Certified
- ☐ COD
- ☐ Express Mail
- ☒ Return Receipt for Merchandise

7. Date of Delivery

4-10-97

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

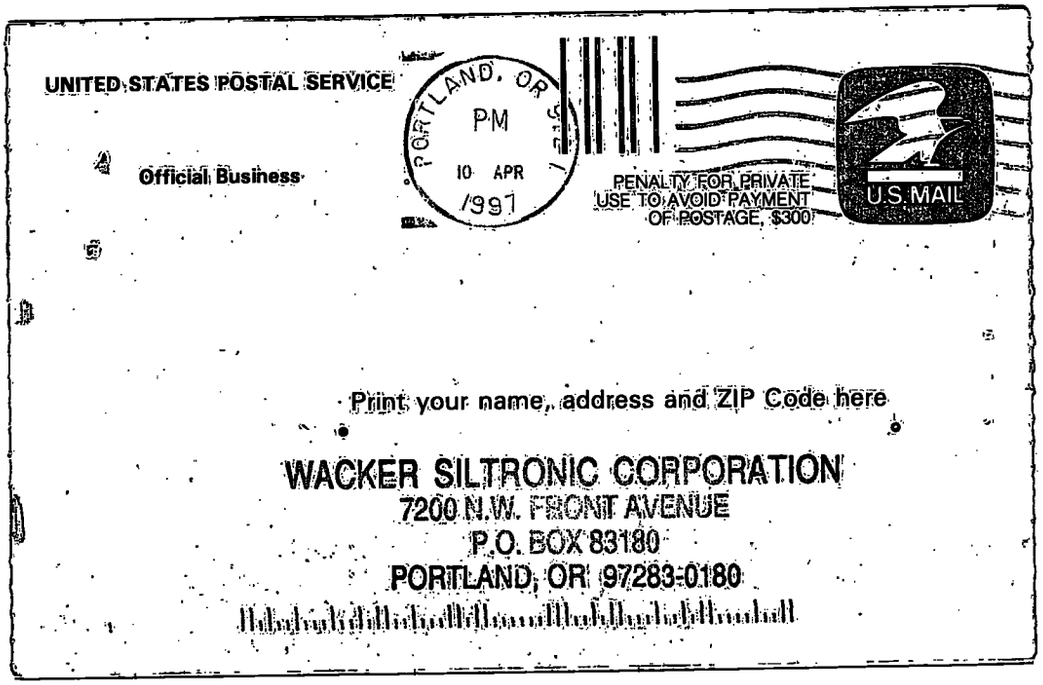
6. Signature (Agent)

X Heajoung Mun

PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

SCOEPA00035579


UNITED STATES POSTAL SERVICE
Official Business
PORTLAND, OR
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10 APR
1997
PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300
U.S. MAIL
Print your name, address and ZIP Code here
WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

# CITY OF PORTLAND
# ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

## INDUSTRIAL WASTEWATER DISCHARGE
## CONTINUOUS pH SELF-MONITORING REPORT (SMR)

NDUSTRY NAME: Wacker Siltronic Corp.

'ERMIT NUMBER: 469-001

REPORT DUE DATE: APRIL 15, 1997

SAMPLING PERIOD: MARCH 1997

TODAY'S DATE: April 7, 1997

REPORT TYPE (CHECK ONE):

BASELINE MONITORING

X PERIODIC COMPLIANCE

SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH Excursions | | SU | | Y N | | **pH Sample Code: 843** |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: John L Fellman Date: April 9, 1997

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

File; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

SCOEPA00035581

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** April 15, 1997

SAMPLING PERIOD: March 1997

TODAY'S DATE: April 7, 1997

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | March 12 1997 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | ~~X~~ COMPOSITE X GRAB | DATE RECEIVED AT LAB > | March 12 1997 | DATE OF SAMPLE ANAL. > | March 13 1997 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organics | 858 | < 0.05 | 1.37 | - | NO | DATE: March 12, 1997 |
| | | | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BY WACKER SILTRONIC CORP:

Signature: John L Pittman Date: April 9, 1997

form 13-1A.fil
rev. 6/24/94

SCOEPA00035582

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | Storm Water | Sampled: 3/12/97 |
| 7200 N.W. Front | Project Number: | P.O. 405748 | Received: 3/12/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 3/25/97 09:58 |

**Volatile Organic Compounds per EPA Method 8240B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 97-71 Feb 2 OWW grab | | | P703172-06 | | | | Water | 2 |
| **Acetone** | 0370504 | 3/13/97 | 3/13/97 | | 50.0 | **495** | ug/l | |
| Acrolein | " | " | " | | 400 | ND | " | |
| Acrylonitrile | " | " | " | | 20.0 | ND | " | |
| Benzene | " | " | " | | 4.00 | ND | " | |
| Bromodichloromethane | " | " | " | | 4.00 | ND | " | |
| Bromoform | " | " | " | | 4.00 | ND | " | |
| Bromomethane | " | " | " | | 20.0 | ND | " | |
| 2-Butanone | " | " | " | | 50.0 | ND | " | |
| Carbon disulfide | " | " | " | | 4.00 | ND | " | |
| Carbon tetrachloride | " | " | " | | 4.00 | ND | " | |
| Chlorobenzene | " | " | " | | 4.00 | ND | " | |
| Chloroethane | " | " | " | | 20.0 | ND | " | 1 |
| Chloroform | " | " | " | | 4.00 | ND | " | |
| Chloromethane | " | " | " | | 20.0 | ND | " | |
| Dibromochloromethane | " | " | " | | 4.00 | ND | " | |
| Dibromomethane | " | " | " | | 4.00 | ND | " | |
| 1,4-Dichloro-2-butene | " | " | " | | 20.0 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 4.00 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 4.00 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 4.00 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 10.0 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 4.00 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 4.00 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 4.00 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 4.00 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 4.00 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 4.00 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 4.00 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 4.00 | ND | " | |
| Ethyl Methacrylate | " | " | " | | 4.00 | ND | " | |
| Ethylbenzene | " | " | " | | 4.00 | ND | " | |
| 2-Hexanone | " | " | " | | 10.0 | ND | " | |
| Iodomethane | " | " | " | | 4.00 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 10.0 | ND | " | |
| Methylene chloride | " | " | " | | 10.0 | ND | " | |
| Styrene | " | " | " | | 4.00 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 4.00 | ND | " | |
| Tetrachloroethene | " | " | " | | 4.00 | ND | " | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035583

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | Storm Water | Sampled: 3/12/97 |
| 7200 N.W. Front | Project Number: | P.O. 405748 | Received: 3/12/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 3/25/97 09:58 |

**Volatile Organic Compounds per EPA Method 8240B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **97-71 (continued)** | | | **P703172-06** | | | | **Water** | **2** |
| Toluene | 0370504 | 3/13/97 | 3/13/97 | | 4.00 | ND | ug/l | |
| 1,1,1-Trichloroethane | " | " | " | | 4.00 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 4.00 | ND | " | |
| Trichloroethene | " | " | " | | 4.00 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 4.00 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 4.00 | ND | " | |
| Vinyl Acetate | " | " | " | | 10.0 | ND | " | |
| Vinyl chloride | " | " | " | | 10.0 | ND | " | |
| Xylenes (total) | " | " | " | | 4.00 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *86.0-115* | | *99.0* | *%* | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *86.0-118* | | *97.3* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *88.0-110* | | *100* | " | |



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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | Storm Water | Sampled: 3/12/97 |
| 7200 N.W. Front | Project Number: | P.O. 405748 | Received: 3/12/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 3/25/97 09:58 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0370504** | **Date Prepared: 3/13/97** | | | | | **Extraction Method: GC/MS Volatiles** | | | | |
| **Blank** | **0370504-BLK1** | | | | | | | | | |
| Acetone | 3/13/97 | | | ND | ug/l | 25.0 | | | | |
| Acrolein | " | | | ND | " | 200 | | | | |
| Acrylonitrile | " | | | ND | " | 10.0 | | | | |
| Benzene | " | | | ND | " | 2.00 | | | | |
| Bromodichloromethane | " | | | ND | " | 2.00 | | | | |
| Bromoform | " | | | ND | " | 2.00 | | | | |
| Bromomethane | " | | | ND | " | 10.0 | | | | |
| 2-Butanone | " | | | ND | " | 25.0 | | | | |
| Carbon disulfide | " | | | ND | " | 2.00 | | | | |
| Carbon tetrachloride | " | | | ND | " | 2.00 | | | | |
| Chlorobenzene | " | | | ND | " | 2.00 | | | | |
| Chloroethane | " | | | ND | " | 10.0 | | | | 1 |
| Chloroform | " | | | ND | " | 2.00 | | | | |
| Chloromethane | " | | | ND | " | 10.0 | | | | |
| Dibromochloromethane | " | | | ND | " | 2.00 | | | | |
| Dibromomethane | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichloro-2-butene | " | | | ND | " | 10.0 | | | | |
| 1,2-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| Dichlorodifluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,1-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| cis-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| trans-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloropropane | " | | | ND | " | 2.00 | | | | |
| cis-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| trans-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| Ethyl Methacrylate | " | | | ND | " | 2.00 | | | | |
| Ethylbenzene | " | | | ND | " | 2.00 | | | | |
| 2-Hexanone | " | | | ND | " | 5.00 | | | | |
| Iodomethane | " | | | ND | " | 2.00 | | | | |
| 4-Methyl-2-pentanone | " | | | ND | " | 5.00 | | | | |
| Methylene chloride | " | | | ND | " | 5.00 | | | | |
| Styrene | " | | | ND | " | 2.00 | | | | |
| 1,1,2,2-Tetrachloroethane | " | | | ND | " | 2.00 | | | | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager

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East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035585

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | Storm Water | Sampled: 3/12/97 |
| 7200 N.W. Front | Project Number: | P.O. 405748 | Received: 3/12/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 3/25/97 09:58 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **0370504-BLK1** | | | | | | | | | |
| Tetrachloroethene | 3/13/97 | | | **ND** | ug/l | **2.00** | | | | |
| Toluene | " | | | **ND** | " | **2.00** | | | | |
| 1,1,1-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| 1,1,2-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| Trichloroethene | " | | | **ND** | " | **2.00** | | | | |
| Trichlorofluoromethane | " | | | **ND** | " | **2.00** | | | | |
| 1,2,3-Trichloropropane | " | | | **ND** | " | **2.00** | | | | |
| Vinyl Acetate | " | | | **ND** | " | **5.00** | | | | |
| Vinyl chloride | " | | | **ND** | " | **5.00** | | | | |
| Xylenes (total) | " | | | **ND** | " | **2.00** | | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.3* | " | *86.0-115* | *96.5* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *18.8* | " | *86.0-118* | *94.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.3* | " | *88.0-110* | *96.5* | | | |
| **LCS** | **0370504-BS1** | | | | | | | | | |
| Benzene | 3/13/97 | 20.0 | | 17.7 | ug/l | 76.0-127 | 88.5 | | | |
| Chlorobenzene | " | 20.0 | | 17.9 | " | 75.0-130 | 89.5 | | | |
| 1,1-Dichloroethene | " | 20.0 | | 19.0 | " | 61.0-145 | 95.0 | | | |
| Toluene | " | 20.0 | | 17.9 | " | 76.0-125 | 89.5 | | | |
| Trichloroethene | " | 20.0 | | 18.7 | " | 71.0-120 | 93.5 | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.6* | " | *86.0-115* | *98.0* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *18.6* | " | *86.0-118* | *93.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.3* | " | *88.0-110* | *96.5* | | | |
| **Matrix Spike** | **0370504-MS1** | | **P703172-05** | | | | | | | |
| Benzene | 3/13/97 | 20.0 | ND | 19.7 | ug/l | 76.0-127 | **98.5** | | | |
| Chlorobenzene | " | 20.0 | ND | 19.7 | " | 75.0-130 | **98.5** | | | |
| 1,1-Dichloroethene | " | 20.0 | ND | 21.0 | " | 61.0-145 | **105** | | | |
| Toluene | " | 20.0 | ND | 19.8 | " | 76.0-125 | **99.0** | | | |
| Trichloroethene | " | 20.0 | ND | 20.8 | " | 71.0-120 | **104** | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.6* | " | *86.0-115* | *98.0* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.1* | " | *86.0-118* | *95.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.7* | " | *88.0-110* | *98.5* | | | |
| **Matrix Spike Dup** | **0370504-MSD1** | | **P703172-05** | | | | | | | |
| Benzene | 3/13/97 | 20.0 | ND | 19.8 | ug/l | 76.0-127 | **99.0** | 11.0 | **0.506** | |
| Chlorobenzene | " | 20.0 | ND | 19.5 | " | 75.0-130 | **97.5** | 13.0 | **1.02** | |
| 1,1-Dichloroethene | " | 20.0 | ND | 20.9 | " | 61.0-145 | **104** | 14.0 | **0.957** | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager



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NORTH CREEK ANALYTICAL
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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | Storm Water | Sampled: 3/12/97 |
| 7200 N.W. Front | Project Number: | P.O. 405748 | Received: 3/12/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 3/25/97 09:58 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Matrix Spike Dup (continued)** | **0370504-MSD1** | | **P703172-05** | | | | | | | |
| Toluene | 3/13/97 | 20.0 | ND | 19.7 | ug/l | 76.0-125 | **98.5** | 13.0 | **0.506** | |
| Trichloroethene | " | 20.0 | ND | 20.8 | " | 71.0-120 | **104** | 14.0 | **0** | |
| *Surrogate: 4-BFB* | " | *20.0* | | *20.3* | " | *86.0-115* | *101* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.5* | " | *86.0-118* | *97.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *20.0* | " | *88.0-110* | *100* | | | |

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager

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East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035587

WACKER
Wacker Siltronic Corporation

March 12, 1997 ER13:ES

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the February Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 219-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035588

Eric Spieing MS 30

P 494 544 817

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to TIM DEAN BUREAU OF ENVIRONMENT SERV | |
| Street & Number 6543 N BURLINGTON AVE | |
| Post Office, State, & ZIP Code PORTLAND, OR. 97203-5452 | |
| Postage | $ .55 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| **TOTAL** Postage & Fees | $ 2.75 |
| Postmark or Date | MAR 1 USPS |

PS Form **3800**, April 1995

SCOEPA00035589

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

TIM DEAN
BUREAU OF ENVIR. SERV.
6543 N. BURLINGTON AVE.
PORTLAND, OR. 97203-5452

4a. Article Number
P 494 544 817

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
3-14

5. Signature (Addressee)

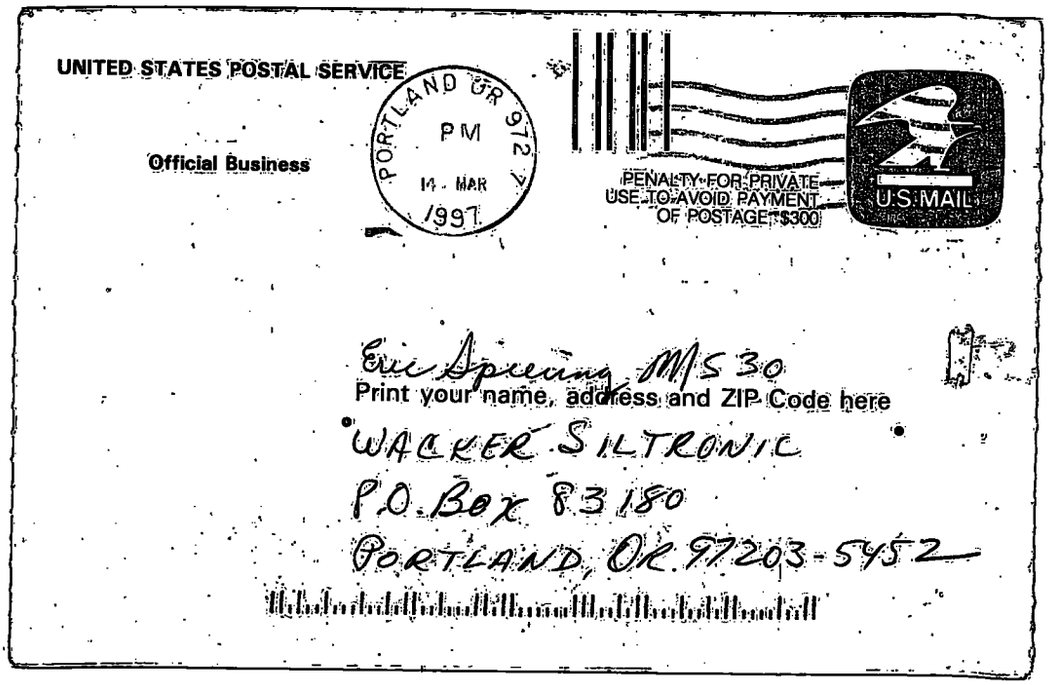
6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

SCOEPA00035590


UNITED STATES POSTAL SERVICE
Official Business
PORTLAND OR 972
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PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE $300
U.S. MAIL
Eric Spreng MS 30
Print your name, address and ZIP Code here
WACKER SILTRONIC
P.O. Box 83180
PORTLAND, OR 97203-5452

CITY OF PORTLAND
ENVIRONMENTAL SERVICES

1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

# INDUSTRIAL WASTEWATER DISCHARGE
# CONTINUOUS pH SELF-MONITORING REPORT (SMR)

INDUSTRY NAME: Wacker Siltronic Corp.

PERMIT NUMBER: 469-001

REPORT DUE DATE: MARCH 15, 1997

SAMPLING PERIOD: FEBRUARY 1997

TODAY'S DATE: March 7, 1997

REPORT TYPE (CHECK ONE):
BASELINE MONITORING
X PERIODIC COMPLIANCE
SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * *

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5–11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH | Excursions | SU | | Y N | | pH Sample Code: 843 |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: Thomas G McCue Date: March 12, 1997

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

File; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** March 15, 1997

SAMPLING PERIOD: February 1997

TODAY'S DATE: March 7, 1997

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *
(For City Use Only)

| SAMPLE DATE > | Feb 5 1997 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | X COMPOSITE GRAB | DATE RECEIVED AT LAB > | Feb 5 1997 | DATE OF SAMPLE ANAL. > | Feb 9 1997 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organ | 858 | < 0.05 | 1.37 | - | NO | DATE: |
| | | | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: Thomas C. McCue

Date: March 12, 1997

form 13-1A.fil
rev. 6/24/94

SCOEPA00035593

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 2/5/97 |
| 7200 N.W. Front | Project Number: | PO# 60068 | Received: 2/5/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 2/18/97 13:38 |

## Volatile Organic Compounds per EPA Method 8240B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes |
|---|---|---|---|---|---|---|---|---|
| 97-45 oww-grab - TTO | | | P702053-06 | | | | Water | |
| **Acetone** | 0270202 | 2/8/97 | 2/9/97 | | 125 | **389** | ug/l | |
| Acrolein | " | " | " | | 1000 | ND | " | |
| Acrylonitrile | " | " | " | | 50.0 | ND | " | |
| Benzene | " | " | " | | 10.0 | ND | " | |
| Bromodichloromethane | " | " | " | | 10.0 | ND | " | |
| Bromoform | " | " | " | | 10.0 | ND | " | |
| Bromomethane | " | " | " | | 50.0 | ND | " | |
| 2-Butanone | " | " | " | | 125 | ND | " | |
| Carbon disulfide | " | " | " | | 10.0 | ND | " | |
| Carbon tetrachloride | " | " | " | | 10.0 | ND | " | |
| Chlorobenzene | " | " | " | | 10.0 | ND | " | |
| Chloroethane | " | " | " | | 50.0 | ND | " | |
| Chloroform | " | " | " | | 10.0 | ND | " | |
| Chloromethane | " | " | " | | 50.0 | ND | " | |
| Dibromochloromethane | " | " | " | | 10.0 | ND | " | |
| Dibromomethane | " | " | " | | 10.0 | ND | " | |
| 1,4-Dichloro-2-butene | " | " | " | | 50.0 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 10.0 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 25.0 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 10.0 | ND | " | |
| cis-1,2-Dichloroethene | 0270202 | 2/8/97 | 2/9/97 | | 10.0 | ND | ug/l | |
| trans-1,2-Dichloroethene | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 10.0 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 10.0 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 10.0 | ND | " | |
| Ethyl Methacrylate | " | " | " | | 10.0 | ND | " | |
| Ethylbenzene | " | " | " | | 10.0 | ND | " | |
| 2-Hexanone | " | " | " | | 25.0 | ND | " | |
| Iodomethane | " | " | " | | 10.0 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 25.0 | ND | " | |
| Methylene chloride | " | " | " | | 25.0 | ND | " | |
| Styrene | " | " | " | | 10.0 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 10.0 | ND | " | |
| Tetrachloroethene | " | " | " | | 10.0 | ND | " | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitio

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035594

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 2/5/97 |
| 7200 N.W. Front | Project Number: | PO# 60068 | Received: 2/5/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 2/18/97 13:38 |

## Volatile Organic Compounds per EPA Method 8240B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes |
|---|---|---|---|---|---|---|---|---|
| **97-45 (continued)** | | | **P702053-06** | | | | **Water** | |
| Toluene | 0270202 | 2/8/97 | 2/9/97 | | 10.0 | ND | ug/l | |
| 1,1,1-Trichloroethane | " | " | " | | 10.0 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 10.0 | ND | " | |
| Trichloroethene | " | " | " | | 10.0 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 10.0 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 10.0 | ND | " | |
| Vinyl Acetate | " | " | " | | 25.0 | ND | " | |
| Vinyl chloride | " | " | " | | 25.0 | ND | " | |
| Xylenes (total) | " | " | " | | 10.0 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *86.0-115* | | *93.5* | *%* | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *86.0-118* | | *91.0* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *88.0-110* | | *95.0* | " | |



SCOEPA00035595

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation
PERMIT NUMBER: 469-001
**REPORT DUE DATE:** 15 March 1997
SAMPLING PERIOD: February 1997
TODAY'S DATE: 7 March 1997

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

(For City Use Only)

| SAMPLE LOCATION> | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH Excursions | | SU | | y n | | pH Sample Code 843 |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a <u>total</u> duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 4/24/94

SCOEPA00035596

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 March 1997

SAMPLING PERIOD: February 1997

TODAY'S DATE: 7 March 1997

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | 5 Feb 1997 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | ~~X~~ COMPOSITE X GRAB | DATE RECEIVED AT LAB > | 5 Feb 1997 | DATE OF SAMPLE ANAL. > | 9 Feb 1997 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organ | 858 | < 0.05 | 1.37 | – | No | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

form 13-1A.fil
rev. 6/24/94

SCOEPA00035597

WACKER
Wacker Siltronic Corporation

February 10, 1997 ER06:ES

Tim Dean
Bureau of Environmental Services
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Dear Mr. Dean,

Enclosed is the January Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035598

Eric Spiering MS 30

P 494 541 605

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to DR ELLIOT ZAIS<br>WATER QUALITY - DEQ | |
| Street & Number<br>2020 ~~West~~ S.W. 4th AVE | |
| Post Office, State, & ZIP Code<br>PORTLAND, OR 97201 | |
| Postage | $ .55 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| **TOTAL** Postage & Fees | $ 2.75 |
| Postmark or Date | USPS |

PORTLAND, OR SAINT JOHNS STA
FEB 5 1997

PS Form **3800**, April 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

DR ELLIOT ZAIS
WATER QUALITY SOURCE CONT.
DEQ - N.W. REGION
2020 S.W. 4th AVE
PORTLAND, OR. 97201

4a. Article Number

P494-541-605

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

FEB 13 1997

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*

X V. Beard

PS Form **3811,** December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service.

SCOEPA00035600

=W PORTLAND OR DOM 9 97208 02/14/97

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

WACKER SILTRONIC
P.O. Box 83180
PORTLAND, OR. 97283

Eric Spiering M/S 30

CITY OF PORTLAND
ENVIRONMENTAL SERVICES
1211 S.W. 5th Ave., Suite 800, Portland, Oregon 97204-3713
(503) 823-5320, FAX (503) 823-5559

# INDUSTRIAL WASTEWATER DISCHARGE CONTINUOUS pH SELF-MONITORING REPORT (SMR)

INDUSTRY NAME: Wacker Siltronic Corp.
PERMIT NUMBER: 469-001
REPORT DUE DATE: FEBRUARY 15, 1997
SAMPLING PERIOD: JANUARY 1997
TODAY'S DATE: February 7, 1997

REPORT TYPE (CHECK ONE):
BASELINE MONITORING
X PERIODIC COMPLIANCE
SPECIAL COMPLIANCE

****************
(For City Use Only)
****************

| SAMPLE LOCATION | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH | Excursions | SU | | Y N | | pH Sample Code: 843 |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
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| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |
| | | : | SU | | Y N | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: John L. Pittman
John L. Pittman, Director of Plant Engineering

Date: February 7, 1997

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any calendar day.
2. pH excursions greater then 12.5 for a duration of more than 5 minutes in any calendar day.
3. pH excursions less than 5.0 regardless of duration during any calendar day.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

File; S:\IU-W\WACKER\INSP-MON\97CpHSMR.DOC

SCOEPA00035602

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

IU TRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** February 15, 1997

SAMPLING PERIOD: January 1997

TODAY'S DATE: February 7, 1997

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | Jan 15 1997 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE X GRAB | DATE RECEIVED AT LAB > | Jan 17 1997 | DATE OF SAMPLE ANAL. > | Jan 20 1997 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organ | 858 | < 0.01 | 1.37 | - | No | DATE: Jan 15 1997 |
| | | | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: John L. Pittman

Date: February 7, 1997

John L. Pittman, Director of Plant Engineering

form 13-1A.fil
rev. 6/24/94

SCOEPA00035603

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 1/15/97 to 1/14/97 |
| 7200 N.W. Front | Project Number: | PO #60068 | Received: 1/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 1/24/97 14:37 |

## Volatile Organic Compounds per EPA Method 8240B
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 97-27 Feb 2 OWW grab | | | P701236-02 | | | | Water | |
| Acrolein | 0170374 | 1/20/97 | 1/20/97 | | 200 | ND | ug/l | |
| Acrylonitrile | " | " | " | | 10.0 | ND | " | |
| Benzene | " | " | " | | 2.00 | ND | " | |
| Bromodichloromethane | " | " | " | | 2.00 | ND | " | |
| Bromoform | " | " | " | | 2.00 | ND | " | |
| Bromomethane | " | " | " | | 10.0 | ND | " | |
| 2-Butanone | " | " | " | | 25.0 | ND | " | |
| Carbon disulfide | " | " | " | | 2.00 | ND | " | |
| Carbon tetrachloride | " | " | " | | 2.00 | ND | " | |
| Chlorobenzene | " | " | " | | 2.00 | ND | " | |
| Chloroethane | " | " | " | | 10.0 | ND | " | |
| **Chloroform** | " | " | " | | 2.00 | **2.19** | " | |
| Chloromethane | " | " | " | | 10.0 | ND | " | |
| Bromochloromethane | " | " | " | | 2.00 | ND | " | |
| Dibromomethane | " | " | " | | 2.00 | ND | " | |
| 1,4-Dichloro-2-butene | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 2.00 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 2.00 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 2.00 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 5.00 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 2.00 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 2.00 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 2.00 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 2.00 | ND | " | |
| trans-1,2-Dichloroethene | 0170374 | 1/20/97 | 1/20/97 | | 2.00 | ND | ug/l | |
| 1,2-Dichloropropane | " | " | " | | 2.00 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 2.00 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 2.00 | ND | " | |
| Ethyl Methacrylate | " | " | " | | 2.00 | ND | " | |
| Ethylbenzene | " | " | " | | 2.00 | ND | " | |
| 2-Hexanone | " | " | " | | 5.00 | ND | " | |
| Iodomethane | " | " | " | | 2.00 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 5.00 | ND | " | |
| Methylene chloride | " | " | " | | 5.00 | ND | " | |
| Styrene | " | " | " | | 2.00 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 2.00 | ND | " | |
| Tetrachloroethene | " | " | " | | 2.00 | ND | " | |
| **Toluene** | " | " | " | | 2.00 | **3.04** | " | |



SCOEPA00035604

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 1/15/97 to 1/14/97 |
| 7200 N.W. Front | Project Number: | PO #60068 | Received: 1/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 1/24/97 14:37 |

**Volatile Organic Compounds per EPA Method 8240B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **97-27 (continued)** | | | **P701236-02** | | | | **Water** | |
| 1,1,1-Trichloroethane | 0170374 | 1/20/97 | 1/20/97 | | 2.00 | ND | ug/l | |
| 1,1,2-Trichloroethane | " | " | " | | 2.00 | ND | " | |
| Trichloroethene | " | " | " | | 2.00 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 2.00 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 2.00 | ND | " | |
| Vinyl Acetate | " | " | " | | 5.00 | ND | " | |
| Vinyl chloride | " | " | " | | 5.00 | ND | " | |
| Xylenes (total) | " | " | " | | 2.00 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *86.0-115* | | *93.5* | *%* | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *86.0-118* | | *92.5* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *88.0-110* | | *94.0* | " | |
| **Acetone** | " | 1/22/97 | 1/22/97 | | 125 | **757** | ug/l | |
| *Surrogate: 4-BFB* | " | " | " | *86.0-115* | | *98.0* | *%* | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *86.0-118* | | *97.5* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *88.0-110* | | *95.0* | " | |



SCOEPA00035605

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 1/15/97 to 1/14/97 |
| 7200 N.W. Front | Project Number: | PO #60068 | Received: 1/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 1/24/97 14:37 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 0170374** | **Date Prepared: 1/20/97** | | | | **Extraction Method: GC/MS Volatiles** | | | | | |
| **Blank** | **0170374-BLK1** | | | | | | | | | |
| Acetone | 1/20/97 | | | ND | ug/l | 25.0 | | | | |
| Acrolein | " | | | ND | " | 200 | | | | |
| Acrylonitrile | " | | | ND | " | 10.0 | | | | |
| Benzene | " | | | ND | " | 2.00 | | | | |
| Bromodichloromethane | " | | | ND | " | 2.00 | | | | |
| Bromoform | " | | | ND | " | 2.00 | | | | |
| Bromomethane | " | | | ND | " | 10.0 | | | | |
| 2-Butanone | " | | | ND | " | 25.0 | | | | |
| Carbon disulfide | " | | | ND | " | 2.00 | | | | |
| Carbon tetrachloride | " | | | ND | " | 2.00 | | | | |
| Chlorobenzene | " | | | ND | " | 2.00 | | | | |
| Chloroethane | " | | | ND | " | 10.0 | | | | |
| hloroform | " | | | ND | " | 2.00 | | | | |
| Chloromethane | " | | | ND | " | 10.0 | | | | |
| Dibromochloromethane | " | | | ND | " | 2.00 | | | | |
| Dibromomethane | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichloro-2-butene | " | | | ND | " | 10.0 | | | | |
| 1,2-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| Dichlorodifluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,1-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| cis-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| trans-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloropropane | " | | | ND | " | 2.00 | | | | |
| cis-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| trans-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| Ethyl Methacrylate | " | | | ND | " | 2.00 | | | | |
| Ethylbenzene | " | | | ND | " | 2.00 | | | | |
| 2-Hexanone | " | | | ND | " | 5.00 | | | | |
| Iodomethane | " | | | ND | " | 2.00 | | | | |
| 4-Methyl-2-pentanone | " | | | ND | " | 5.00 | | | | |
| Methylene chloride | " | | | ND | " | 5.00 | | | | |
| Styrene | " | | | ND | " | 2.00 | | | | |
| 1,1,2,2-Tetrachloroethane | " | | | ND | " | 2.00 | | | | |



SCOEPA00035606

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 1/15/97 to 1/14/97 |
| 7200 N.W. Front | Project Number: | PO #60068 | Received: 1/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 1/24/97 14:37 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **0170374-BLK1** | | | | | | | | | |
| Tetrachloroethene | 1/20/97 | | | **ND** | ug/l | **2.00** | | | | |
| Toluene | " | | | **ND** | " | **2.00** | | | | |
| 1,1,1-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| 1,1,2-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| Trichloroethene | " | | | **ND** | " | **2.00** | | | | |
| Trichlorofluoromethane | " | | | **ND** | " | **2.00** | | | | |
| 1,2,3-Trichloropropane | " | | | **ND** | " | **2.00** | | | | |
| Vinyl Acetate | " | | | **ND** | " | **5.00** | | | | |
| Vinyl chloride | " | | | **ND** | " | **5.00** | | | | |
| Xylenes (total) | " | | | **ND** | " | **2.00** | | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.8* | " | *86.0-115* | *99.0* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.9* | " | *86.0-118* | *99.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.1* | " | *88.0-110* | *95.5* | | | |
| **Blank** | **0170374-BLK2** | | | | | | | | | |
| Acetone | 1/22/97 | | | **ND** | ug/l | **25.0** | | | | |
| Acrolein | " | | | **ND** | " | **200** | | | | |
| Acrylonitrile | " | | | **ND** | " | **10.0** | | | | |
| Benzene | " | | | **ND** | " | **2.00** | | | | |
| Bromodichloromethane | " | | | **ND** | " | **2.00** | | | | |
| Bromoform | " | | | **ND** | " | **2.00** | | | | |
| Bromomethane | " | | | **ND** | " | **10.0** | | | | |
| 2-Butanone | " | | | **ND** | " | **25.0** | | | | |
| Carbon disulfide | " | | | **ND** | " | **2.00** | | | | |
| Carbon tetrachloride | " | | | **ND** | " | **2.00** | | | | |
| Chlorobenzene | " | | | **ND** | " | **2.00** | | | | |
| Chloroethane | " | | | **ND** | " | **10.0** | | | | |
| Chloroform | " | | | **ND** | " | **2.00** | | | | |
| Chloromethane | " | | | **ND** | " | **10.0** | | | | |
| Dibromochloromethane | " | | | **ND** | " | **2.00** | | | | |
| Dibromomethane | " | | | **ND** | " | **2.00** | | | | |
| 1,4-Dichloro-2-butene | " | | | **ND** | " | **10.0** | | | | |
| 1,2-Dichlorobenzene | " | | | **ND** | " | **2.00** | | | | |
| 1,3-Dichlorobenzene | " | | | **ND** | " | **2.00** | | | | |
| 1,4-Dichlorobenzene | " | | | **ND** | " | **2.00** | | | | |
| Dichlorodifluoromethane | " | | | **ND** | " | **5.00** | | | | |
| 1,1-Dichloroethane | " | | | **ND** | " | **2.00** | | | | |
| 1,2-Dichloroethane | " | | | **ND** | " | **2.00** | | | | |



SCOEPA00035607

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 1/15/97 to 1/14/97 |
| 7200 N.W. Front | Project Number: | PO #60068 | Received: 1/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 1/24/97 14:37 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **0170374-BLK2** | | | | | | | | | |
| 1,1-Dichloroethene | 1/22/97 | | | **ND** | ug/l | **2.00** | | | | |
| cis-1,2-Dichloroethene | " | | | **ND** | " | **2.00** | | | | |
| trans-1,2-Dichloroethene | " | | | **ND** | " | **2.00** | | | | |
| 1,2-Dichloropropane | " | | | **ND** | " | **2.00** | | | | |
| cis-1,3-Dichloropropene | " | | | **ND** | " | **2.00** | | | | |
| trans-1,3-Dichloropropene | " | | | **ND** | " | **2.00** | | | | |
| Ethyl Methacrylate | " | | | **ND** | " | **2.00** | | | | |
| Ethylbenzene | " | | | **ND** | " | **2.00** | | | | |
| 2-Hexanone | " | | | **ND** | " | **5.00** | | | | |
| Iodomethane | " | | | **ND** | " | **2.00** | | | | |
| 4-Methyl-2-pentanone | " | | | **ND** | " | **5.00** | | | | |
| Methylene chloride | " | | | **ND** | " | **5.00** | | | | |
| Styrene | " | | | **ND** | " | **2.00** | | | | |
| 1,2,2-Tetrachloroethane | " | | | **ND** | " | **2.00** | | | | |
| Tetrachloroethene | " | | | **ND** | " | **2.00** | | | | |
| Toluene | " | | | **ND** | " | **2.00** | | | | |
| 1,1,1-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| 1,1,2-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| Trichloroethene | " | | | **ND** | " | **2.00** | | | | |
| Trichlorofluoromethane | " | | | **ND** | " | **2.00** | | | | |
| 1,2,3-Trichloropropane | " | | | **ND** | " | **2.00** | | | | |
| Vinyl Acetate | " | | | **ND** | " | **5.00** | | | | |
| Vinyl chloride | " | | | **ND** | " | **5.00** | | | | |
| Xylenes (total) | " | | | **ND** | " | **2.00** | | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.5* | " | *86.0-115* | *97.5* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.5* | " | *86.0-118* | *97.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *18.9* | " | *88.0-110* | *94.5* | | | |
| **LCS** | **0170374-BS1** | | | | | | | | | |
| Benzene | 1/20/97 | 20.0 | | 18.7 | ug/l | 76.0-127 | 93.5 | | | |
| Chlorobenzene | " | 20.0 | | 19.2 | " | 75.0-130 | 96.0 | | | |
| 1,1-Dichloroethene | " | 20.0 | | 19.3 | " | 61.0-145 | 96.5 | | | |
| Toluene | " | 20.0 | | 17.4 | " | 76.0-125 | 87.0 | | | |
| Trichloroethene | " | 20.0 | | 18.9 | " | 71.0-120 | 94.5 | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.8* | " | *86.0-115* | *99.0* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.7* | " | *86.0-118* | *98.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.1* | " | *88.0-110* | *95.5* | | | |



SCOEPA00035608

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | BOD | Sampled: 1/15/97 to 1/14/97 |
| 7200 N.W. Front | Project Number: | PO #60068 | Received: 1/17/97 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 1/24/97 14:37 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **LCS** | **0170374-BS2** | | | | | | | | | |
| Benzene | 1/22/97 | 20.0 | | 19.8 | ug/l | 76.0-127 | 99.0 | | | |
| Chlorobenzene | " | 20.0 | | 20.4 | " | 75.0-130 | 102 | | | |
| 1,1-Dichloroethene | " | 20.0 | | 22.0 | " | 61.0-145 | 110 | | | |
| Toluene | " | 20.0 | | 18.4 | " | 76.0-125 | 92.0 | | | |
| Trichloroethene | " | 20.0 | | 20.2 | " | 71.0-120 | 101 | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.9* | " | *86.0-115* | *99.5* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.7* | " | *86.0-118* | *98.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.1* | " | *88.0-110* | *95.5* | | | |
| **Matrix Spike** | **0170374-MS1** | | **P701236-01** | | | | | | | |
| Benzene | 1/20/97 | 20.0 | ND | 18.5 | ug/l | 76.0-127 | **92.5** | | | |
| Chlorobenzene | " | 20.0 | ND | 20.3 | " | 75.0-130 | **101** | | | |
| 1,1-Dichloroethene | " | 20.0 | ND | 17.6 | " | 61.0-145 | **88.0** | | | |
| luene | " | 20.0 | ND | 17.3 | " | 76.0-125 | **86.5** | | | |
| richloroethene | " | 20.0 | ND | 19.8 | " | 71.0-120 | **99.0** | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.0* | " | *86.0-115* | *95.0* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *18.1* | " | *86.0-118* | *90.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *18.5* | " | *88.0-110* | *92.5* | | | |
| **Matrix Spike Dup** | **0170374-MSD1** | | **P701236-01** | | | | | | | |
| Benzene | 1/20/97 | 20.0 | ND | 18.7 | ug/l | 76.0-127 | **93.5** | 11.0 | **1.08** | |
| Chlorobenzene | " | 20.0 | ND | 20.3 | " | 75.0-130 | **101** | 13.0 | **0** | |
| 1,1-Dichloroethene | " | 20.0 | ND | 18.0 | " | 61.0-145 | **90.0** | 14.0 | **2.25** | |
| Toluene | " | 20.0 | ND | 16.7 | " | 76.0-125 | **83.5** | 13.0 | **3.53** | |
| Trichloroethene | " | 20.0 | ND | 19.7 | " | 71.0-120 | **98.5** | 14.0 | **0.506** | |
| *Surrogate: 4-BFB* | " | *20.0* | | *18.5* | " | *86.0-115* | *92.5* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *18.7* | " | *86.0-118* | *93.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *17.9* | " | *88.0-110* | *89.5* | | | |

rth Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions*

Joy Chang, Project Manager



SCOEPA00035609

WACKER
Wacker Siltronic Corporation

Bureau of Environmental Services
RECEIVED
JAN 15 1997
Industrial Source Control

January 14, 1997 ER03:ES

Tim Dean
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Dean,

Enclosed is the ~~November~~ December 1996 Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035610

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

* * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * *

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: January 15, 1997

SAMPLING PERIOD: December 1996

TODAY'S DATE: January 8, 1997

REPORT TYPE (CHECK ONE):
- ☐ BASELINE MONITORING
- x PERIODIC COMPLIANCE
- ☐ SPECIAL COMPLIANCE

| SAMPLE LOCATION> | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | No pH Excursions | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER/SILTRONIC CORP. BY:

Signature: [signature] Date: January 13, 1997

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

IN RY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** January 15, 1997

SAMPLING PERIOD: December 1996

TODAY'S DATE: January 8, 1997

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | 12-4-96 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 12-5-96 | DATE OF SAMPLE ANAL. > | 12-14 96 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | 0.002 | 0.3 | - | No | DATE: Dec 4 1996 |
| Cadmium | 736 | < 0.001 | 0.7 | - | No | DATE: Dec 4 1996 |
| Chromium | 748 | 0.009 | 3.8 | | No | DATE: Dec 4 1996 |
| Mercury | 813 | < 0.0002 | 0.014 | - | No | DATE: Dec 4 1996 |
| | | | | | | DATE: |
| Total Toxic Organ. | 858 | < 0.01 | 1.37 | - | No | DATE: Dec 2 1996 |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| A e data submitted IAW | | | | | | DATE: |
| | | | | | | DATE: |
| City of Portland Environmental Services | | | | | | DATE: |
| | | | | | | DATE: |
| Municipal Pretreatment | | | | | | DATE: |
| | | | | | | DATE: |
| Wastewater Discharge Permit #469-001 | | | | | | DATE: |
| (dated September 18, 1996) | | | | | | DATE: |
| | | | | | | DATE: |
| Schedule B, Monitoring and Reporting Requirements | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: John L Pittman Date: January 13, 1997

form 13-1A.fil
rev. 6/24/94

SCOEPA00035612

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

RECEIVED DEC 18 1996

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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 12/2/96 |
| 7200 N.W. Front | Project Number: | 96-154 | Received: 12/4/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/12/96 16:28 |

## ANALYTICAL REPORT FOR SAMPLES:

| Sample Description | Laboratory Sample Number | Sample Matrix | Date Sampled |
|---|---|---|---|
| 96-154 | P612057-01 | Water | 12/2/96 |

North Creek Analytical, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody docume*
*This analytical report must be reproduced in its entire*

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035613

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
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| | | |
|---|---|---|
| Wacker Siltronics Corporation | Project: [illegible] | Sampled: 12/2/96 |
| 7200 N.W. Front | Project Number: 96-154 | Received: 12/4/96 |
| Portland, OR 97210 | Project Manager: [illegible] Rothschild | Reported: 12/12/96 16:28 |

## Volatile Organic Compounds per EPA Method 8240B
### North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 96-154 OWW TTC's | | | P612057-01 | | | | Water | |
| **Acetone** | 1260231 | 12/11/96 | 12/11/96 | | 25.0 | **158** | ug/l | |
| Acrolein | " | " | " | | 200 | ND | " | |
| Acrylonitrile | " | " | " | | 10.0 | ND | " | |
| Benzene | " | " | " | | 2.00 | ND | " | |
| Bromodichloromethane | " | " | " | | 2.00 | ND | " | |
| Bromoform | " | " | " | | 2.00 | ND | " | |
| Bromomethane | " | " | " | | 10.0 | ND | " | |
| 2-Butanone | " | " | " | | 25.0 | ND | " | |
| Carbon disulfide | " | " | " | | 2.00 | ND | " | |
| Carbon tetrachloride | " | " | " | | 2.00 | ND | " | |
| Chlorobenzene | " | " | " | | 2.00 | ND | " | |
| Chloroethane | " | " | " | | 10.0 | ND | " | |
| **Chloroform** | " | " | " | | 2.00 | **4.74** | " | |
| Chloromethane | " | " | " | | 10.0 | ND | " | |
| Dibromochloromethane | " | " | " | | 2.00 | ND | " | |
| Dibromomethane | " | " | " | | 2.00 | ND | " | |
| 1,4-Dichloro-2-butene | " | " | " | | 10.0 | ND | " | |
| 1,2-Dichlorobenzene | " | " | " | | 2.00 | ND | " | |
| 1,3-Dichlorobenzene | " | " | " | | 2.00 | ND | " | |
| 1,4-Dichlorobenzene | " | " | " | | 2.00 | ND | " | |
| Dichlorodifluoromethane | " | " | " | | 5.00 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 2.00 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 2.00 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 2.00 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 2.00 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 2.00 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 2.00 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 2.00 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 2.00 | ND | " | |
| Ethyl Methacrylate | " | " | " | | 2.00 | ND | " | |
| Ethylbenzene | " | " | " | | 2.00 | ND | " | |
| 2-Hexanone | " | " | " | | 5.00 | ND | " | |
| Iodomethane | " | " | " | | 2.00 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 5.00 | ND | " | |
| Methylene chloride | " | " | " | | 5.00 | ND | " | |
| Styrene | " | " | " | | 2.00 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 2.00 | ND | " | |
| Tetrachloroethene | " | " | " | | 2.00 | ND | " | |



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NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 12/2/96 |
| 7200 N.W. Front | Project Number: | 96-154 | Received: 12/4/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/12/96 16:28 |

**Volatile Organic Compounds per EPA Method 8240B**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **96-154 (continued)** | | | **P612057-01** | | | | **Water** | |
| Toluene | 1260231 | 12/11/96 | 12/11/96 | | 2.00 | ND | ug/l | |
| 1,1,1-Trichloroethane | " | " | " | | 2.00 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 2.00 | ND | " | |
| Trichloroethene | " | " | " | | 2.00 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 2.00 | ND | " | |
| 1,2,3-Trichloropropane | " | " | " | | 2.00 | ND | " | |
| Vinyl Acetate | " | " | " | | 5.00 | ND | " | |
| Vinyl chloride | " | " | " | | 5.00 | ND | " | |
| Xylenes (total) | " | " | " | | 2.00 | ND | " | |
| *Surrogate: 4-BFB* | " | " | " | *86.0-115* | | *101* | *%* | |
| *Surrogate: Dibromofluoromethane* | " | " | " | *86.0-118* | | *97.5* | " | |
| *Surrogate: Toluene-d8* | " | " | " | *88.0-110* | | *97.0* | " | |



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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 12/2/96 |
| 7200 N.W. Front | Project Number: | 96-154 | Received: 12/4/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/12/96 16:28 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 1260231** | **Date Prepared: 12/11/96** | | | | | **Extraction Method: GC/MS Volatiles** | | | | |
| **Blank** | **1260231-BLK1** | | | | | | | | | |
| Acetone | 12/11/96 | | | ND | ug/l | 25.0 | | | | |
| Acrolein | " | | | ND | " | 200 | | | | |
| Acrylonitrile | " | | | ND | " | 10.0 | | | | |
| Benzene | " | | | ND | " | 2.00 | | | | |
| Bromodichloromethane | " | | | ND | " | 2.00 | | | | |
| Bromoform | " | | | ND | " | 2.00 | | | | |
| Bromomethane | " | | | ND | " | 10.0 | | | | |
| 2-Butanone | " | | | ND | " | 25.0 | | | | |
| Carbon disulfide | " | | | ND | " | 2.00 | | | | |
| Carbon tetrachloride | " | | | ND | " | 2.00 | | | | |
| Chlorobenzene | " | | | ND | " | 2.00 | | | | |
| Chloroethane | " | | | ND | " | 10.0 | | | | |
| Chloroform | " | | | ND | " | 2.00 | | | | |
| Chloromethane | " | | | ND | " | 10.0 | | | | |
| Dibromochloromethane | " | | | ND | " | 2.00 | | | | |
| Dibromomethane | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichloro-2-butene | " | | | ND | " | 10.0 | | | | |
| 1,2-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,3-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| 1,4-Dichlorobenzene | " | | | ND | " | 2.00 | | | | |
| Dichlorodifluoromethane | " | | | ND | " | 5.00 | | | | |
| 1,1-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloroethane | " | | | ND | " | 2.00 | | | | |
| 1,1-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| cis-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| trans-1,2-Dichloroethene | " | | | ND | " | 2.00 | | | | |
| 1,2-Dichloropropane | " | | | ND | " | 2.00 | | | | |
| cis-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| trans-1,3-Dichloropropene | " | | | ND | " | 2.00 | | | | |
| Ethyl Methacrylate | " | | | ND | " | 2.00 | | | | |
| Ethylbenzene | " | | | ND | " | 2.00 | | | | |
| 2-Hexanone | " | | | ND | " | 5.00 | | | | |
| Iodomethane | " | | | ND | " | 2.00 | | | | |
| 4-Methyl-2-pentanone | " | | | ND | " | 5.00 | | | | |
| Methylene chloride | " | | | ND | " | 5.00 | | | | |
| Styrene | " | | | ND | " | 2.00 | | | | |
| 1,1,2,2-Tetrachloroethane | " | | | ND | " | 2.00 | | | | |



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NORTH CREEK ANALYTICAL
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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: n/a | Sampled: | 12/2/96 |
| 7200 N.W. Front | Project Number: 96-154 | Received: | 12/4/96 |
| Portland, OR 97210 | Project Manager: Thomas Rothschild | Reported: | 12/12/96 16:28 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (continued)** | **1260231-BLK1** | | | | | | | | | |
| Tetrachloroethene | 12/11/96 | | | **ND** | ug/l | **2.00** | | | | |
| Toluene | " | | | **ND** | " | **2.00** | | | | |
| 1,1,1-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| 1,1,2-Trichloroethane | " | | | **ND** | " | **2.00** | | | | |
| Trichloroethene | " | | | **ND** | " | **2.00** | | | | |
| Trichlorofluoromethane | " | | | **ND** | " | **2.00** | | | | |
| 1,2,3-Trichloropropane | " | | | **ND** | " | **2.00** | | | | |
| Vinyl Acetate | " | | | **ND** | " | **5.00** | | | | |
| Vinyl chloride | " | | | **ND** | " | **5.00** | | | | |
| Xylenes (total) | " | | | **ND** | " | **2.00** | | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *20.0* | " | *86.0-115* | *100* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *18.6* | " | *86.0-118* | *93.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.2* | " | *88.0-110* | *96.0* | | | |
| **LCS** | **1260231-BS1** | | | | | | | | | |
| Benzene | 12/11/96 | 20.0 | | 19.0 | ug/l | 76.0-127 | 95.0 | | | |
| Chlorobenzene | " | 20.0 | | 19.7 | " | 75.0-130 | 98.5 | | | |
| 1,1-Dichloroethene | " | 20.0 | | 19.5 | " | 61.0-145 | 97.5 | | | |
| Toluene | " | 20.0 | | 19.0 | " | 76.0-125 | 95.0 | | | |
| Trichloroethene | " | 20.0 | | 20.1 | " | 71.0-120 | 101 | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.8* | " | *86.0-115* | *99.0* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.1* | " | *86.0-118* | *95.5* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.2* | " | *88.0-110* | *96.0* | | | |
| **Matrix Spike** | **1260231-MS1** | | **P612140-02** | | | | | | | |
| Benzene | 12/11/96 | 20.0 | ND | 19.7 | ug/l | 76.0-127 | **98.5** | | | |
| Chlorobenzene | " | 20.0 | ND | 20.1 | " | 75.0-130 | **101** | | | |
| 1,1-Dichloroethene | " | 20.0 | ND | 19.7 | " | 61.0-145 | **98.5** | | | |
| Toluene | " | 20.0 | ND | 19.2 | " | 76.0-125 | **96.0** | | | |
| Trichloroethene | " | 20.0 | ND | 19.9 | " | 71.0-120 | **99.5** | | | |
| *Surrogate: 4-BFB* | " | *20.0* | | *20.0* | " | *86.0-115* | *100* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.2* | " | *86.0-118* | *96.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.2* | " | *88.0-110* | *96.0* | | | |
| **Matrix Spike Dup** | **1260231-MSD1** | | **P612140-02** | | | | | | | |
| Benzene | 12/11/96 | 20.0 | ND | 20.2 | ug/l | 76.0-127 | **101** | 11.0 | **2.51** | |
| Chlorobenzene | " | 20.0 | ND | 20.4 | " | 75.0-130 | **102** | 13.0 | **0.985** | |
| 1,1-Dichloroethene | " | 20.0 | ND | 20.3 | " | 61.0-145 | **101** | 14.0 | **2.51** | |



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NORTH CREEK ANALYTICAL
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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 12/2/96 |
| 7200 N.W. Front | Project Number: | 96-154 | Received: 12/4/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/12/96 16:28 |

## Volatile Organic Compounds per EPA Method 8240B/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Matrix Spike Dup (continued)** | **1260231-MSD1** | | **P612140-02** | | | | | | | |
| Toluene | 12/11/96 | 20.0 | ND | 19.7 | ug/l | 76.0-125 | **98.5** | 13.0 | **2.57** | |
| Trichloroethene | " | 20.0 | ND | 20.9 | " | 71.0-120 | **104** | 14.0 | **4.42** | |
| *Surrogate: 4-BFB* | " | *20.0* | | *19.9* | " | *86.0-115* | *99.5* | | | |
| *Surrogate: Dibromofluoromethane* | " | *20.0* | | *19.2* | " | *86.0-118* | *96.0* | | | |
| *Surrogate: Toluene-d8* | " | *20.0* | | *19.3* | " | *88.0-110* | *96.5* | | | |



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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 12/2/96 |
| 7200 N.W. Front | Project Number: | 96-154 | Received: 12/4/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/12/96 16:28 |

## Notes and Definitions

| # | Note |
|---|---|
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| Recov. | Recovery |
| RPD | Relative Percent Difference |



SCOEPA00035619

12°

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9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

# CHAIN OF CUSTODY REPORT

**Work Order #** P612057

REPORT TO: Wacker Siltronic Corporation
ATTENTION: Thomas J. Rothschild
ADDRESS: 7200 N.W. Front Avenue
Portland, Oregon 97210
PHONE: 243-2020 FAX: 241-7599
PROJECT NAME: —
PROJECT NUMBER: 96-154
SAMPLED BY: Thomas J. Rothschild

INVOICE TO: Wacker Siltronic Corporation
ATTENTION: Accounts Payable
ADDRESS: 7200 N.W. Front Avenue
Portland, Oregon 97210
P.O. NUMBER: 6 0065 NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: [X] Standard | 7 | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: [5] Standard | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Analysis Request: EPA 5946 | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|
| 1. | 96-154 | 2 Dec 96 0920 | | X | W | 2 | Preser. w/ HCl |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |

RELINQUISHED BY (Signature): Dianne Mullan DATE: 12-4-96
PRINT NAME: Thomas J. Rothschild FIRM: Wacker TIME: 0900
RELINQUISHED BY (Signature): Paul Conroy DATE: 12-4-96
PRINT NAME: PAUL CONROY FIRM: WCKR. TIME: 11:36

RECEIVED BY (Signature): Paul Conroy DATE: 12-4-96
PRINT NAME: PAUL CONROY FIRM: WCKR. TIME: 11:00
RECEIVED BY (Signature): Sara McClurg DATE: 11-4-96
PRINT NAME: Sara McClurg FIRM: NCA TIME: 1136

PAGE OF

SCOEPA00035620

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 12/4/96 |
| 7200 N.W. Front | Project Number: | n/a | Received: 12/5/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/18/96 15:39 |

## ANALYTICAL REPORT FOR SAMPLES:

| Sample Description | Laboratory Sample Number | Sample Matrix | Date Sampled |
|---|---|---|---|
| 96-162 | P612091-01 | Water | 12/4/96 |
| 96-161 | P612091-02 | Water | 12/4/96 |

orth Creek Analytical, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document*
*This analytical report must be reproduced in its entirety*

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
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SCOEPA00035621

NORTH CREEK ANALYTICAL
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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 12/4/96 |
| 7200 N.W. Front | Project Number: | n/a | Received: 12/5/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/18/96 15:39 |

**Metals per EPA 200 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **96-162** Fab 2 AWW Effluent Composite | | | **P612091-01** | | | | **Water** | |
| **Arsenic** | 1260293 | 12/12/96 | 12/14/96 | EPA 200.8 | 0.00100 | **0.00210** | mg/l | |
| Cadmium | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| **Chromium** | " | " | " | EPA 200.8 | 0.00100 | **0.00950** | " | |



*Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035622

NORTH CREEK ANALYTICAL
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 12/4/96 |
| 7200 N.W. Front | Project Number: | n/a | Received: 12/5/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/18/96 15:39 |

**Metals per EPA 6000/7000 Series Methods**
**North Creek Analytical - Portland**

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **96-162** | | | **P612091-01** | | | | **Water** | |
| Mercury | 1260145 | 12/9/96 | 12/9/96 | EPA 7470A | 0.000266 | ND | mg/l | |
| **96-161** | | | **P612091-02** | | | | **Water** | |
| Mercury | 1260145 | 12/9/96 | 12/9/96 | EPA 7470A | 0.000200 | ND | mg/l | |



SCOEPA00035623

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 12/4/96 |
| 7200 N.W. Front | Project Number: | n/a | Received: 12/5/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/18/96 15:39 |

## Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 1260293** | **Date Prepared: 12/12/96** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **1260293-BLK1** | | | | | | | | | |
| Arsenic | 12/14/96 | | | **ND** | mg/l | **0.00100** | | | | |
| Cadmium | " | | | **ND** | " | **0.000100** | | | | |
| Chromium | " | | | **ND** | " | **0.00100** | | | | |
| **LCS** | **1260293-BS1** | | | | | | | | | |
| Arsenic | 12/14/96 | 0.100 | | 0.0958 | mg/l | 80.0-110 | 95.8 | | | |
| Cadmium | " | 0.100 | | 0.100 | " | 85.0-115 | 100 | | | |
| Chromium | " | 0.100 | | 0.102 | " | 85.0-115 | 102 | | | |
| **Duplicate** | **1260293-DUP1** | | **P612115-01** | | | | | | | |
| Arsenic | 12/14/96 | | 0.00930 | 0.00950 | mg/l | | | 20.0 | **2.13** | |
| Cadmium | " | | ND | ND | " | | | 20.0 | | |
| Chromium | " | | ND | ND | " | | | 20.0 | | |
| **Matrix Spike** | **1260293-MS1** | | **P612115-01** | | | | | | | |
| Arsenic | 12/14/96 | 0.100 | 0.00930 | 0.107 | mg/l | 70.0-130 | **97.7** | | | |
| Cadmium | " | 0.100 | ND | 0.0984 | " | 70.0-130 | **98.4** | | | |
| Chromium | " | 0.100 | ND | 0.104 | " | 70.0-130 | **104** | | | |
| **Matrix Spike** | **1260293-MS2** | | **P612058-01** | | | | | | | |
| Arsenic | 12/14/96 | 0.100 | ND | 0.0988 | mg/l | 70.0-130 | **98.8** | | | |
| Cadmium | " | 0.100 | ND | 0.0929 | " | 70.0-130 | **92.9** | | | |
| Chromium | " | 0.100 | 0.00300 | 0.111 | " | 70.0-130 | **108** | | | |

.th Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035624

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 12/4/96 |
| 7200 N.W. Front | Project Number: | n/a | Received: 12/5/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/18/96 15:39 |

## Metals per EPA 6000/7000 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 1260145** | **Date Prepared: 12/9/96** | | | | | **Extraction Method: Metals** | | | | |
| **Blank** | **1260145-BLK1** | | | | | | | | | |
| Mercury | 12/9/96 | | | **ND** | mg/l | **0.000200** | | | | |
| **LCS** | **1260145-BS1** | | | | | | | | | |
| Mercury | 12/9/96 | 0.00500 | | 0.00492 | mg/l | 80.0-120 | 98.4 | | | |
| **Duplicate** | **1260145-DUP1** | | **P612072-01** | | | | | | | |
| Mercury | 12/9/96 | | ND | ND | mg/l | | | 20.0 | | |
| **Matrix Spike** | **1260145-MS1** | | **P612072-01** | | | | | | | |
| Mercury | 12/9/96 | 0.00500 | ND | 0.00493 | mg/l | 75.0-125 | **98.6** | | | |
| **Matrix Spike** | **1260145-MS2** | | **P612091-01** | | | | | | | |
| Mercury | 12/9/96 | 0.00500 | ND | 0.00519 | mg/l | 75.0-125 | **104** | | | |

NORTH CREEK ANALYTICAL
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SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 12/4/96 |
| 7200 N.W. Front | Project Number: | n/a | Received: 12/5/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/18/96 15:39 |

## Notes and Definitions

| # | Note |
|---|---|
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| Recov. | Recovery |
| RPD | Relative Percent Difference |



SCOEPA00035626

8.0°C

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (2[illegible]1-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

# CHAIN OF CUSTODY REPORT

**Work Order #** P612091

REPORT TO: Wacker Siltronic Corporation
ATTENTION: Thomas J. Rothschild
ADDRESS: 7200 NW Front Avenue, Portland, Oregon 97210
PHONE: 243-2020 FAX: 241-7599
PROJECT NAME: —
PROJECT NUMBER: —
SAMPLED BY: Thomas J. Rothschild/DM

INVOICE TO: Wacker Siltronic Corporation
ATTENTION: Accounts Payable
ADDRESS: 7200 N.W. Front Avenue, Portland, Oregon 97210
P.O. NUMBER: 60068 NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: ~~10~~ (Standard) | 7 | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: 5 (Standard) | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

Analysis Request:

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Mercury | Arsenic | Cadmium | Chromium | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. | ~~96-161~~ DM | ~~4 Dec 96 0900 DM~~ | | ~~X~~ | | | | ~~W~~ | ~~1~~ | ~~Refrig DM~~ |
| 2. | 96-162 | 4 Dec 96 1200 | | X | X | X | X | W | 1 | $HNO_3$, Refrig |
| 3. | | | | | | | | | | |
| 4. | 96-161 | 5 Dec 96 0840 | | X | | | | W | 1 | $HNO_3$-Refrig |
| 5. | | | | | | | | | | |
| 6. | | | | | | | | | | |
| 7. | | | | | | | | | | |
| 8. | | | | | | | | | | |
| 9. | | | | | | | | | | |
| 10. | | | | | | | | | | |

RELINQUISHED BY (Signature): Dianne Mullan DATE: 12-5-96
PRINT NAME: Dianne Mullan FIRM: Wacker TIME: 1100

RECEIVED BY (Signature): Paul Conroy DATE: 12-5-96
PRINT NAME: PAUL CONROY FIRM: WCKR TIME: 11:40

RELINQUISHED BY (Signature): Paul Conroy DATE: 12-5-96
PRINT NAME: PAUL CONROY FIRM: WCKR TIME: 12:02

RECEIVED BY (Signature): DATE: 12/5/96
PRINT NAME: [illegible] FIRM: NCA TIME: 12:02

ADDITIONAL REMARKS:

PAGE OF

SCOEPA00035627

WACKER
Wacker Siltronic Corporation

December 12, 1996 ER55:ES

Tim Dean
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Dean,

Enclosed is the November Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035628

Tom McCue M/530
P 494 541 524

US Postal Service
**Receipt for Certified Mail**
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to TIM DEAN<br>CITY OF PORTLAND-BUR ENV SERV | |
| Street & Number<br>1211 SW 5th - STE 800 | |
| Post Office, State, & ZIP Code<br>PORTLAND, OR. 97204- | |
| Postage | $ .78 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | $ 2.98 |
| Postmark or Date | DEC 13 1996 |

PS Form **3800**, April 1995

SAINT JOHNS, OR.
USPS

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Tim DEAN
IND. WASTE. Mgmt
CITY OF PORTLAND
BUR. ENV. SERV.
1211 S.W. 5th. AVE - STE 800
PORTLAND, OR. 97204-3713

4a. Article Number
P494.541.524

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery 16 DEC 1996

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811**, December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service.

SCOEPA00035630

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

WACKER SILTRONIC
P.O. BOX 83180
PORTLAND, OR. 97283

Tom McCue M/S30

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: December 15, 1996

SAMPLING PERIOD: November 1996

TODAY'S DATE: December 12, 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)

* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH Excursions | | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: [signature] Date: December 13, 1996

John L. Pittman, Director, Plant Engineering

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: December 15, 1996

SAMPLING PERIOD: November 1996

TODAY'S DATE: December 12, 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | Nov 8 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | Nov 22 1996 | DATE OF SAMPLE ANAL. > | Dec 3 1996 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | 0.00180 | 0.3 | - | No | DATE: |
| Cadmium | 736 | <0.001 | 0.7 | | No | DATE: |
| Copper | 752 | 0.118 | 2.3 | | No | DATE: |
| Lead | 811 | 0.00230 | 0.7 | - | No | DATE: |
| Nickel | 824 | 0.0254 | 3.0 | | No | DATE: |
| Zinc | 874 | 0.297 | 4.0 | | No | DATE: |
| Mercury | 813 | <0.0008 | 0.014 | - | No | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | (Split with City of Portland) | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
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| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: John L. Pittman

John L. Pittman, Director
Plant Engineering

Date: December 13, 1996

Form 13-1A.fil
rev. 6/24/94

SCOEPA00035633

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 11/15/96 |
| 7200 N.W. Front | Project Number: | 60068 | Received: 11/22/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/12/96 12:45 |

## Metals per EPA 200 Series Methods
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| **96-135** OWW composite 3 Nov 96 3yr | | | **P611355-01** | | | | **Water** | |
| **Arsenic** | 1260026 | 11/27/96 | 12/3/96 | EPA 200.8 | 0.00100 | **0.00180** | mg/l | |
| Cadmium | " | " | " | EPA 200.8 | 0.00100 | ND | " | |
| **Copper** | " | " | " | EPA 200.8 | 0.00200 | **0.118** | " | |
| **Lead** | " | " | " | EPA 200.8 | 0.00100 | **0.00230** | " | |
| **Nickel** | " | " | " | EPA 200.8 | 0.00200 | **0.0254** | " | |
| **Zinc** | " | " | " | EPA 200.8 | 0.00500 | **0.297** | " | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035634

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 11/15/96 |
| 7200 N.W. Front | Project Number: | 60068 | Received: 11/22/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/12/96 12:45 |

## Metals per EPA 6000/7000 Series Methods
## North Creek Analytical - Portland

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|---|---|---|---|---|---|---|---|---|
| 96-135 | | | P611355-01 | | | | Water | |
| Mercury | 1260145 | 12/9/96 | 12/9/96 | EPA 7470A | 0.000800 | ND | mg/l | |

*Refer to end of report for text of notes and definitions.*

North Creek Analytical, Inc.

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035635

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | |
|---|---|---|
| Wacker Siltronics Corporation | Project: n/a | Sampled: 11/15/96 |
| 7200 N.W. Front | Project Number: 60068 | Received: 11/22/96 |
| Portland, OR 97210 | Project Manager: Thomas Rothschild | Reported: 12/12/96 12:45 |

## Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 1260026** | **Date Prepared: 11/27/96** | | | | | **Extraction Method: EPA 200/3005** | | | | |
| **Blank** | **1260026-BLK1** | | | | | | | | | |
| Arsenic | 12/2/96 | | | ND | mg/l | 0.00100 | | | | |
| Cadmium | " | | | ND | " | 0.00100 | | | | |
| Copper | " | | | ND | " | 0.00200 | | | | |
| Lead | " | | | ND | " | 0.00100 | | | | |
| Nickel | " | | | ND | " | 0.00200 | | | | |
| Zinc | " | | | ND | " | 0.00500 | | | | |
| **LCS** | **1260026-BS1** | | | | | | | | | |
| Arsenic | 12/2/96 | 0.100 | | 0.0869 | mg/l | 85.0-115 | 86.9 | | | |
| Cadmium | " | 0.100 | | 0.0914 | " | 85.0-115 | 91.4 | | | |
| Copper | " | 0.100 | | 0.101 | " | 85.0-115 | 101 | | | |
| Lead | " | 0.100 | | 0.102 | " | 85.0-115 | 102 | | | |
| Nickel | " | 0.100 | | 0.101 | " | 85.0-115 | 101 | | | |
| Zinc | " | 0.100 | | 0.0830 | " | 80.0-110 | 83.0 | | | |
| **Duplicate** | **1260026-DUP1** | | **P611377-01** | | | | | | | |
| Arsenic | 12/2/96 | | ND | ND | mg/l | | | 20.0 | | |
| Cadmium | " | | ND | ND | " | | | 20.0 | | |
| Copper | " | | 0.0157 | 0.0157 | " | | | 20.0 | 0 | |
| Lead | " | | 0.0108 | 0.00960 | " | | | 20.0 | 11.8 | |
| Nickel | " | | 0.00200 | ND | " | | | 20.0 | | |
| Zinc | " | | 0.0878 | 0.0890 | " | | | 20.0 | 1.36 | |
| **Matrix Spike** | **1260026-MS1** | | **P611377-01** | | | | | | | |
| Arsenic | 12/2/96 | 0.100 | ND | 0.0822 | mg/l | 70.0-130 | 82.2 | | | |
| Cadmium | " | 0.100 | ND | 0.0871 | " | 70.0-130 | 87.1 | | | |
| Copper | " | 0.100 | 0.0157 | 0.115 | " | 70.0-130 | 99.3 | | | |
| Lead | " | 0.100 | 0.0108 | 0.108 | " | 70.0-130 | 97.2 | | | |
| Nickel | " | 0.100 | 0.00200 | 0.104 | " | 70.0-130 | 102 | | | |
| Zinc | " | 0.100 | 0.0878 | 0.158 | " | 70.0-130 | 70.2 | | | |
| **Matrix Spike** | **1260026-MS2** | | **P611300-01** | | | | | | | |
| Arsenic | 12/2/96 | 0.100 | ND | 0.0902 | mg/l | 70.0-130 | 90.2 | | | |
| Cadmium | " | 0.100 | ND | 0.0911 | " | 70.0-130 | 91.1 | | | |
| Copper | " | 0.100 | 0.00530 | 0.109 | " | 70.0-130 | 104 | | | |
| Lead | " | 0.100 | 0.00220 | 0.104 | " | 70.0-130 | 102 | | | |
| Nickel | 12/5/96 | 0.100 | ND | 0.107 | " | 70.0-130 | 107 | | | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.*

Joy Chang, Project Manager



SCOEPA00035636

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | |
|---|---|---|
| Wacker Siltronics Corporation | Project: n/a | Sampled: 11/15/96 |
| 7200 N.W. Front | Project Number: 60068 | Received: 11/22/96 |
| Portland, OR 97210 | Project Manager: Thomas Rothschild | Reported: 12/12/96 12:45 |

## Metals per EPA 200 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Matrix Spike (continued)** | **1260026-MS2** | | **P611300-01** | | | | | | | |
| Zinc | 12/2/96 | 0.100 | 0.0420 | 0.126 | mg/l | 70.0-130 | 84.0 | | | |

*Refer to end of report for text of notes and definitions.*



SCOEPA00035637

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 11/15/96 |
| 7200 N.W. Front | Project Number: | 60068 | Received: 11/22/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/12/96 12:45 |

## Metals per EPA 6000/7000 Series Methods/Quality Control
## North Creek Analytical - Portland

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit / Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: 1260145** | **Date Prepared: 12/9/96** | | | | | **Extraction Method: Metals** | | | | |
| **Blank** | **1260145-BLK1** | | | | | | | | | |
| Mercury | 12/9/96 | | | ND | mg/l | 0.000200 | | | | |
| **LCS** | **1260145-BS1** | | | | | | | | | |
| Mercury | 12/9/96 | 0.00500 | | 0.00492 | mg/l | 70.0-130 | 98.4 | | | |
| **Duplicate** | **1260145-DUP1** | | **P612072-01** | | | | | | | |
| Mercury | 12/9/96 | | ND | ND | mg/l | | | 20.0 | | |
| **Matrix Spike** | **1260145-MS1** | | **P612072-01** | | | | | | | |
| Mercury | 12/9/96 | 0.00500 | ND | 0.00493 | mg/l | 80.0-120 | 98.6 | | | |
| **Matrix Spike** | **1260145-MS2** | | **P612091-01** | | | | | | | |
| Mercury | 12/9/96 | 0.00500 | ND | 0.00519 | mg/l | 80.0-120 | 104 | | | |

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

Joy Chang, Project Manager



SCOEPA00035638

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

| | | | |
|---|---|---|---|
| Wacker Siltronics Corporation | Project: | n/a | Sampled: 11/15/96 |
| 7200 N.W. Front | Project Number: | 60068 | Received: 11/22/96 |
| Portland, OR 97210 | Project Manager: | Thomas Rothschild | Reported: 12/12/96 12:45 |

## Notes and Definitions

| # | Note |
|---|---|
| 1 | Analyses are not controlled on RPD values from sample concentrations less than 5 times the reporting limit. |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| Recov. | Recovery |
| RPD | Relative Percent Difference |

North Creek Analytical, Inc.

Joy Chang, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



SCOEPA00035639

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

| | | | |
|---|---|---|---|
| INDUSTRY NAME: | Wacker Siltronic Corporation | REPORT TYPE (CHECK ONE): | * * * * * * * * * * * * * * * * (For City Use Only) |
| PERMIT NUMBER: | 469-001 | ☐ BASELINE MONITORING | |
| **REPORT DUE DATE:** | 15 December 1996 | x PERIODIC COMPLIANCE | |
| SAMPLING PERIOD: | November 1996 | ☐ SPECIAL COMPLIANCE | |
| TODAY'S DATE: | 12 December 1996 | | * * * * * * * * * * * * * * * * |

| SAMPLE LOCATION> | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH | Excursions | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: ______________________ Date: ______________________

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a <u>total</u> duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 December 1996

SAMPLING PERIOD: November 1996

TODAY'S DATE: 12 December 1996

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | 8 Nov 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 22 Nov 1996 | DATE OF SAMPLE ANAL. > | 3 Dec 1996 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | 0.00180 | 0.3 | — | No | DATE: |
| Cadmium | 736 | < 0.001 | 0.7 | | No | DATE: |
| Copper | 752 | 0.118 | 2.3 | | No | DATE: |
| Lead | 811 | 0.00230 | 0.7 | — | No | DATE: |
| Nickel | 824 | 0.0254 | 3.0 | | No | DATE: |
| Zinc | 874 | 0.297 | 4.0 | | No | DATE: |
| Mercury | 813 | < 0.0008 | 0.014 | — | No | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | (Split with City of Portland) | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

form 13-1A.fil
rev. 6/24/94

SCOEPA00035641

WACKER
Wacker Siltronic Corporation

November 11, 1996 ER53:ES

Tim Dean
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Dean,

Enclosed is the October Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035642

Eric Spiering WM530

P 354 825 983

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to TIM DEAN<br>CITY PORTLAND-BUR. ENV. SERV | |
| Street & Number<br>1211 S.W. 5th. - STE 800 | |
| Post Office, State, & ZIP Code<br>PORTLAND, OR. 97204-3713 | |
| Postage | $ .78 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.60 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| **TOTAL** Postage & Fees | $ 2.98 |
| Postmark or Date | NOV 12 1996 |

PORTLAND, OR SAINT JOHNS STA. USPS

PS Form **3800**, April 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.,

3. Article Addressed to:

TIM DEAN
INDUSTRIAL SOURCE CTL MGMT.
BUR. ENV. SERV.
CITY PORTLAND
1211 S.W. 5TH AVE - STE 800
PORTLAND, OR. 97204-3713

4a. Article Number

P 354 825 983

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

13 NOV 1996

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*

X

8. Addressee's Address *(Only if requested and fee is paid)*

Thank you for using Return Receipt Service.

PS Form **3811,** December 1994 Domestic Return Receipt

SCOEPA00035644

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

WACKER SILTRONIC
P.O. BOX 83180
PORTLAND, OR. 97283

Eric Speiring MS 30

# CITY OF PORTLAND
## INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** November 15, 1996

SAMPLING PERIOD: October 1996

TODAY'S DATE: November 8, 1996

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * * (For City Use Only) * * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | Oct. 9, 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > Oct. 10, 1996 | | DATE OF SAMPLE ANAL. > | Oct. 15, 1996 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| TTO | - | <0.01 | 1.37 | - | NO | DATE: Oct. 9, 1996 |
| | | | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP BY:

Signature: Thomas C. McCann Date: 11/11/96

form 13-1A.fil
rev. 6/24/94

SCOEPA00035646

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

**INDUSTRY NAME:** Wacker Siltronic Corporation
**PERMIT NUMBER:** 469-001
**REPORT DUE DATE:** November 15, 1996
**SAMPLING PERIOD:** October 1996
**TODAY'S DATE:** November 8, 1996

**REPORT TYPE (CHECK ONE):**
- ☐ BASELINE MONITORING
- x PERIODIC COMPLIANCE
- ☐ SPECIAL COMPLIANCE

(For City Use Only)

| SAMPLE LOCATION> | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH Excursions | | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: Thomas S. M'Lin Date: 11/11/96

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035647

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

Offices:
BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

Correspondence to: 18939 - 120th Ave. NE, #101, Bothell, WA 98011

# Volatile Organic Compounds per EPA 8240

**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:** TTO'S & CHROME (T)

**NCA Project #:** P610221
**Matrix:** water
**Received:** 10/10/96
**Sampled:** 10/09/96
**Prepared:** 10/15/96
**Analyzed:** 10/15/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-121 | P610221-1 | Acetone | 170 | 25 |
| OWW grab | | Acrolein | ND | 200 |
| 9 oct96 | | Acrylonitrile | ND | 10 |
| | | Benzene | ND | 2.0 |
| | | Bromodichloromethane | ND | 2.0 |
| | | Bromoform | ND | 2.0 |
| | | Bromomethane | ND | 10 |
| | | 2-Butanone | ND | 25 |
| | | Carbon Disulfide | ND | 2.0 |
| | | Carbon Tetrachloride | ND | 2.0 |
| | | Chlorobenzene | ND | 2.0 |
| | | Chloroethane | ND | 10 |
| | | Chloroform | 2.4 | 2.0 |
| | | Chloromethane | ND | 10 |
| | | Dibromochloromethane | ND | 2.0 |
| | | Dibromomethane | ND | 2.0 |
| | | 1,4-Dichloro-2-butene | ND | 10 |
| | | 1,2-Dichlorobenzene | ND | 2.0 |
| | | 1,3-Dichlorobenzene | ND | 2.0 |
| | | 1,4-Dichlorobenzene | ND | 2.0 |
| | | Dichlorodifluoromethane | ND | 5.0 |
| | | 1,1-Dichloroethane | ND | 2.0 |
| | | 1,2-Dichloroethane | ND | 2.0 |
| | | 1,1-Dichloroethene | ND | 2.0 |
| | | cis-1,2-Dichloroethene | ND | 2.0 |
| | | trans1,2Dichloroethene | ND | 2.0 |
| | | 1,2-Dichloropropane | ND | 2.0 |
| | | cis-1,3-Dichloropropene | ND | 2.0 |
| | | trans1,3Dichloropropene | ND | 2.0 |
| | | Ethyl Methacrylate | ND | 2.0 |
| | | Ethylbenzene | ND | 2.0 |
| | | 2-Hexanone | ND | 5.0 |
| | | Iodomethane | ND | 2.0 |
| | | 4-Methyl-2-pentanone | ND | 5.0 |
| | | Methylene Chloride | ND | 7.0 |
| | | Styrene | ND | 2.0 |
| | | 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| | | Tetrachloroethene | ND | 2.0 |
| | | Toluene | ND | 2.0 |
| | | 1,1,1-Trichloroethane | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035648

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

Offices:
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SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

Correspondence to: 18939 - 120th Ave. NE, #101, Bothell, WA 98011

# Volatile Organic Compounds per EPA 8240
**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:** TTO'S & CHROME (T)

**NCA Project #:** P610221
**Matrix:** water
**Received:** 10/10/96
**Sampled:** 10/09/96
**Prepared:** 10/15/96
**Analyzed:** 10/15/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-121 (continued) | P610221-1 | | | |
| | | 1,1,2-Trichloroethane | ND | 2.0 |
| | | Trichloroethene | ND | 2.0 |
| | | Trichlorofluoromethane | ND | 2.0 |
| | | 1,2,3-Trichloropropane | ND | 2.0 |
| | | Vinyl Acetate | ND | 5.0 |
| | | Vinyl Chloride | ND | 5.0 |
| | | Xylenes (total) | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035649

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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Correspondence to: 18939 - 120th Ave. NE, #101, Bothell, WA 98011

## SURROGATE RECOVERIES (%)

**Client:** Wacker Siltronic Corporation
**Project:** TTO'S & CHROME (T)

NCA Number: P610221
**Received:** 10/10/1996

| Sample Name | Analyte | Result | Control Limits |
|---|---|---|---|
| **Volatile Organic Compounds per EPA 8240** | | | |
| 96-121 | 4-Bromofluorobenzene | 96 | 86-115 |
| | Dibromofluoromethane | 101 | 86-118 |
| | Toluene-d8 | 96 | 88-110 |
| 96-122 | 4-Bromofluorobenzene | 95 | 86-115 |
| | Dibromofluoromethane | 102 | 86-118 |
| | Toluene-d8 | 98 | 88-110 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035650

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

Offices:
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

Correspondence to: 18939 - 120th Ave. NE, #101, Bothell, WA 98011

October 31, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Tom Rothschild

Re: Quality Control Data
JOB #
P.O.# 60068
PROJECT - TTO'S & CHROME (T)

NCA project number P610221.

Note: Surrogate Recoveries are included in the final report.

## QUALITY CONTROL DEFINITIONS

### METHOD BLANK RESULTS

The method blank is an analyte-free matrix which is carried through the same analytical process as the samples. It is used to document contamination that may result from the analytical process.

### SURROGATE STANDARD

A surrogate standard (i.e., a chemical compound not expected to occur in an environmental sample) is added to each sample, blank, and matrix spike sample just prior to extraction or processing. The recovery of the surrogate standard is used to monitor for unusual matrix effects, gross sample processing errors, etc. Surrogate recovery is evaluated for acceptance by determining whether the measured concentration falls within accepted limits.

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

Offices:
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202
Correspondence to: 18939 - 120th Ave. NE, #101, Bothell, WA 98011

## BATCH QUALITY CONTROL RESULTS
### Volatile Organic Compounds per EPA 8240

**Client:** Wacker Siltronic Corporation
**Project:** TTO'S & CHROME (T)

**NCA Project #:** P610221
**Received:** 10/10/96

**METHOD BLANK**
**Batch # VW96041a**
**Results In ug/L (ppb)**

| Compound | Result | MRL |
|---|---|---|
| Acetone | ND | 25 |
| Acrolein | ND | 200 |
| Acrylonitrile | ND | 10 |
| Benzene | ND | 2.0 |
| Bromodichloromethane | ND | 2.0 |
| Bromoform | ND | 2.0 |
| Bromomethane | ND | 10 |
| 2-Butanone | ND | 25 |
| Carbon Disulfide | ND | 2.0 |
| Carbon Tetrachloride | ND | 2.0 |
| Chlorobenzene | ND | 2.0 |
| Chloroethane | ND | 10 |
| Chloroform | ND | 2.0 |
| Chloromethane | ND | 10 |
| Dibromochloromethane | ND | 2.0 |
| Dibromomethane | ND | 2.0 |
| 1,4-Dichloro-2-butene | ND | 10 |
| 1,2-Dichlorobenzene | ND | 2.0 |
| 1,3-Dichlorobenzene | ND | 2.0 |
| 1,4-Dichlorobenzene | ND | 2.0 |
| Dichlorodifluoromethane | ND | 5.0 |
| 1,1-Dichloroethane | ND | 2.0 |
| 1,2-Dichloroethane | ND | 2.0 |
| 1,1-Dichloroethene | ND | 2.0 |
| cis-1,2-Dichloroethene | ND | 2.0 |
| trans1,2Dichloroethene | ND | 2.0 |
| 1,2-Dichloropropane | ND | 2.0 |
| cis-1,3-Dichloropropene | ND | 2.0 |
| trans1,3Dichloropropene | ND | 2.0 |
| Ethyl Methacrylate | ND | 2.0 |
| Ethylbenzene | ND | 2.0 |
| 2-Hexanone | ND | 5.0 |
| Iodomethane | ND | 2.0 |
| 4-Methyl-2-pentanone | ND | 5.0 |
| Methylene Chloride | ND | 5.0 |
| Styrene | ND | 2.0 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| Tetrachloroethene | ND | 2.0 |
| Toluene | ND | 2.0 |
| 1,1,1-Trichloroethane | ND | 2.0 |
| 1,1,2-Trichloroethane | ND | 2.0 |
| Trichloroethene | ND | 2.0 |
| Trichlorofluoromethane | ND | 2.0 |
| 1,2,3-Trichloropropane | ND | 2.0 |
| Vinyl Acetate | ND | 5.0 |



SCOEPA00035652

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

Offices:
BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

Correspondence to: 18939 - 120th Ave. NE, #101, Bothell, WA 98011

## BATCH QUALITY CONTROL RESULTS
### Volatile Organic Compounds per EPA 8240

**Client:** Wacker Siltronic Corporation
**Project:** TTO'S & CHROME (T)

**NCA Project #:** P610221
**Received:** 10/10/96

| | | |
|---|---|---|
| Vinyl Chloride | ND | 5.0 |
| Xylenes (total) | ND | 2.0 |
| Date Prepared | 10/15/96 | |
| Date Analyzed | 10/15/96 | |

| Surrogate Recovery (%) | Result | Control Limit |
|---|---|---|
| 4-Bromofluorobenzene | 96 | 86-115 |
| Dibromofluoromethane | 98 | 86-118 |
| Toluene-d8 | 99 | 88-110 |



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# BATCH QUALITY CONTROL RESULTS
## Volatile Organic Compounds per EPA 8240

**Client:** Wacker Siltronic Corporation
**Project:** TTO'S & CHROME (T)

**NCA Project #:** P610221
**Received:** 10/10/96

**MATRIX SPIKE AND MATRIX SPIKE DUPLICATE**
**Batch # VW96041a** **Spike ID P610111-4a**
**Results In ug/L (ppb)**

| Compound | Spike Added | Sample Conc | MS Conc | MS %Rec |
|---|---|---|---|---|
| Benzene | 20 | ND | 21.1 | 106 |
| Chlorobenzene | 20 | ND | 19.7 | 99 |
| 1,1-Dichloroethene | 20 | ND | 21.7 | 109 |
| Toluene | 20 | ND | 19.4 | 97 |
| Trichloroethene | 20 | ND | 20.0 | 100 |

| Compound | Spike Added | MSD Conc | MSD % Rec | RPD | QC Limit RPD | QC Limit % Rec |
|---|---|---|---|---|---|---|
| Benzene | 20 | 20.4 | 102 | 3.8 | 11 | 76-127 |
| Chlorobenzene | 20 | 19.7 | 99 | 0 | 13 | 75-130 |
| 1,1-Dichloroethene | 20 | 21.1 | 106 | 2.8 | 14 | 61-145 |
| Toluene | 20 | 19.0 | 95 | 2.1 | 13 | 76-125 |
| Trichloroethene | 20 | 19.9 | 100 | 0 | 14 | 71-120 |



SCOEPA00035654

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202
Correspondence to: 18939 - 120th Ave. NE, #101, Bothell, WA 98011

## BATCH QUALITY CONTROL RESULTS
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:** TTO'S & CHROME (T)

**NCA Project #:** P610221
**Received:** 10/10/96

**LABORATORY CONTROL SAMPLE**
**Batch # VW96041a**
**Results In ug/L (ppb)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Benzene | 20 | 19.8 | 99 | 76-127 |
| Chlorobenzene | 20 | 19.7 | 99 | 75-130 |
| 1,1-Dichloroethene | 20 | 20.1 | 101 | 61-145 |
| Toluene | 20 | 18.8 | 94 | 76-125 |
| Trichloroethene | 20 | 20.0 | 100 | 71-120 |



SCOEPA00035655

12.0 C

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

# CHAIN OF CUSTODY REPORT

**Work Order #** PC/1022

REPORT TO: Wacker Siltronic
ATTENTION: Tom Roths child
ADDRESS: 7200 N.W. Front Ave
Portland, OR
PHONE: 243-2020 FAX: 241-7599
PROJECT NAME: TTO's & Chrome (T)
PROJECT NUMBER:
SAMPLED BY: Dianne Mullan

INVOICE TO: Same
ATTENTION:
ADDRESS:
P.O. NUMBER: 60068 NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: [10] Standard | 7 | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: [5] Standard | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NCA SAMPLE ID (Laboratory Use Only) | Analysis Request: EPA 8240 | Chromium Total | MATRIX (W, S, A, O) | # OF CONTAINERS | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| 1. | 96.121 | 10.09.96 0815 | -1 | X | | W | 2 | HCL |
| 2. | 96.122 | 10.09.96 0815 | 2 | X | | W | 2 | HCL |
| 3. | 96.123 | 10.10.96 0830 | 3 | | X | W | 1 | HNO3 |
| 4. | | | | | | | | |
| 5. | | | | | | | | |
| 6. | | | | | | | | |
| 7. | | | | | | | | |
| 8. | | | | | | | | |
| 9. | | | | | | | | |
| 10. | | | | | | | | |

RELINQUISHED BY (Signature): Dianne Mullan DATE: 10-10-96
PRINT NAME: Dianne Mullan FIRM: Wacker TIME: 1030
RELINQUISHED BY (Signature): P. Conroy DATE: 10-10-96
PRINT NAME: PAUL CONROY FIRM: WCKR. TIME: 1120

RECEIVED BY (Signature): P. Conroy DATE: 10-10-96
PRINT NAME: PAUL CONROY FIRM: WCKR. TIME: 10:30 AM
RECEIVED BY (Signature): Karin Stanley DATE: 10-10-96
PRINT NAME: Karin Stanley FIRM: NCA TIME: 1120

ADDITIONAL REMARKS:

PAGE OF

SCOEPA00035656

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 November 1996

SAMPLING PERIOD: October 1996

TODAY'S DATE: 8 November 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | October 9, 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > 10 Oct 1996 | | DATE OF SAMPLE ANAL. > | 15 Oct 1996 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| TTO | — | <0.01 | 1.37 | — | No | DATE: 9 Oct 1996 |
| | | | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP BY:

Signature: _____ Date: _____

form 13-1A.f11
rev. 6/24/94

SCOEPA00035657

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation
PERMIT NUMBER: 469-001
**REPORT DUE DATE:** 15 November 1996
SAMPLING PERIOD: October 1996
TODAY'S DATE: 8 November 1996

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | No | pH : Ex | cursions | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: ______________________ Date: ______________

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

WACKER
Wacker Siltronic Corporation

October 14, 1996 ER42:ES

Tim Dean
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Dean,

Enclosed is the September Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035659

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation
PERMIT NUMBER: 469-001
**REPORT DUE DATE:** October 15, 1996
SAMPLING PERIOD: September 1996
TODAY'S DATE: October 9, 1996

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | FAB 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No pH Excursions | | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP BY:

Signature: Thomas C. M'Cu[illegible] Date: 10/14/96

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035660

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** October 15, 1996

SAMPLING PERIOD: September 1996

TODAY'S DATE: October 9, 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE DATE > | Sept 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | Sept 23 1996 | DATE OF SAMPLE ANAL. > | Sept 24 1996 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| TTO | - | <0.01 | 1.37 | - | No | DATE: Sept 18, 1996 |
| | | | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: Thomas G. McIlwain

Date: 10/14/96

form 13-1A.fil
rev. 6/24/94

NORTH CREEK ANALYTICAL
*Environmental Laboratory Services*

*Offices:*
BOTHELL ▪ (206) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

*Correspondence to:* 18939 - 120th Ave. NE, #101, Bothell, WA 98011

**RECEIVED** OCT 0 4 1996

September 26, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Tom Rothschild

RE: JOB #
P.O.# 60068
PROJECT - CE-FAB-2

Enclosed are test results for your samples received in this lab on Sep. 23, 1996. For your reference, these analyses have been assigned our NCA # P609309.

Solid samples are reported on a dry weight basis except for Oregon DEQ Fuels Methods and where otherwise noted.

This report will be accompanied by a separate Quality Control Data Report, unless omitted by client request.

Please call if you have any questions.

Respectfully,

Joy Chang
Project Manager

SCOEPA00035662

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

Offices:
BOTHELL ▪ (206) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Correspondence to: 18939 - 120th Ave. NE, #101, Bothell, WA 98011

# Volatile Organic Compounds per EPA 8240
**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:** CE-FAB-2

**NCA Project #:** P609309
**Matrix:** water
**Received:** 09/23/96
**Sampled:** 09/18/96
**Prepared:** 09/24/96
**Analyzed:** 09/24/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-120 | P609309-3 | Acetone | 340 | 25 |
| Fab 2 CWW grab is Sep96 | | Acrolein | ND | 200 |
| | | Acrylonitrile | ND | 10 |
| | | Benzene | ND | 2.0 |
| | | Bromodichloromethane | ND | 2.0 |
| | | Bromoform | ND | 2.0 |
| | | Bromomethane | ND | 10 |
| | | 2-Butanone | ND | 25 |
| | | Carbon Disulfide | ND | 2.0 |
| | | Carbon Tetrachloride | ND | 2.0 |
| | | Chlorobenzene | ND | 2.0 |
| | | Chloroethane | ND | 10 |
| | | Chloroform | 2.8 | 2.0 |
| | | Chloromethane | ND | 10 |
| | | Dibromochloromethane | ND | 2.0 |
| | | Dibromomethane | ND | 2.0 |
| | | 1,4-Dichloro-2-butene | ND | 10 |
| | | 1,2-Dichlorobenzene | ND | 2.0 |
| | | 1,3-Dichlorobenzene | ND | 2.0 |
| | | 1,4-Dichlorobenzene | ND | 2.0 |
| | | Dichlorodifluoromethane | ND | 5.0 |
| | | 1,1-Dichloroethane | ND | 2.0 |
| | | 1,2-Dichloroethane | ND | 2.0 |
| | | 1,1-Dichloroethene | ND | 2.0 |
| | | cis-1,2-Dichloroethene | ND | 2.0 |
| | | trans1,2Dichloroethene | ND | 2.0 |
| | | 1,2-Dichloropropane | ND | 2.0 |
| | | cis-1,3-Dichloropropene | ND | 2.0 |
| | | trans1,3Dichloropropene | ND | 2.0 |
| | | Ethyl Methacrylate | ND | 2.0 |
| | | Ethylbenzene | ND | 2.0 |
| | | 2-Hexanone | ND | 5.0 |
| | | Iodomethane | ND | 2.0 |
| | | 4-Methyl-2-pentanone | ND | 5.0 |
| | | Methylene Chloride | ND | 5.0 |
| | | Styrene | ND | 2.0 |
| | | 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| | | Tetrachloroethene | ND | 2.0 |
| | | Toluene | ND | 2.0 |
| | | 1,1,1-Trichloroethane | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035663

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 October 1996

SAMPLING PERIOD: September 1996

TODAY'S DATE: 9 October 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | No pH Excursions | | | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: ______________________ Date: ______________________

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 October 1996

SAMPLING PERIOD: September 1996

TODAY'S DATE: 9 October 1996

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | September 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 23 Sep 96 | DATE OF SAMPLE ANAL. > | 24 Sep 96 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| TTO | - | < 0.01 | 1.37 | - | No | DATE: 18 Sep 96 |
| | | | | | | DATE: |
| | | | | | | DATE: |
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| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: _____ Date: _____

form 13-1A.fil
rev. 6/24/94

SCOEPA00035665

WACKER
Wacker Siltronic Corporation

September 13, 1996 ER39:ES

Tim Dean
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Dean,

Enclosed is the August Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

The City of Portland collected a sample of our effluent this month and split the sample with us. We have included the analysis results from this sample with our report.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035666

P 530 311 829

US Postal Service
**Receipt for Certified Mail**
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to TIM DEAN, BES | |
| Street & Number 1211 SW 5th Ave Ste 800 | |
| Post Office, State, & ZIP Code Portland OR 97204 | |
| Postage | $ .55 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Address ~~see's Address~~ | |
| **TOTAL** ~~Postage & Fees~~ | $ 2.75 |
| Postmark or Date | PORTLAND OR MAIN POST OFFICE SEP 13 1996 |

PS Form **3800**, April 1995

SCOEPA00035667

**Stick postage stamps to article to cover First-Class postage, certified mail fee, and charges for any selected optional services** *(See front).*

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached, and present the article at a post office service window or hand it to your rural carrier *(no extra charge).*

2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach, and retain the receipt, and mail the article.

3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article **RETURN RECEIPT REQUESTED** adjacent to the number.

4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.

5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.

6. Save this receipt and present it if you make an inquiry.

PS Form **3800,** April 1995 *(Reverse)*

SCOEPA00035668

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr Tim DEAN
Industrial Waste Management
City of Portland, BES
1211 SW 5th Ave Suite 800
Portland OR 97204-3713

4a. Article Number

P 530 311 829

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

16 SEP 1996

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*

X

PS Form **3811,** December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

WACKER SILTRONIC
ERIC SPIERING MS/30
PO BOX 83180
Por Hand OR 97283-0180

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation
PERMIT NUMBER: 469-001
**REPORT DUE DATE:** 9-15-96
SAMPLING PERIOD: August 1996
TODAY'S DATE: 9-6-96

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | FAB 2 PIPE | METER BRAND | FOXBORO | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | NO pH EXCURSIONS | | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP BY:

Signature: Thomas C. McClue Date: 9/13/96

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 9-15-96

SAMPLING PERIOD: August 1996

TODAY'S DATE: 9-11-96

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | August 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | Aug 27 1996 | DATE OF SAMPLE ANAL. > | Aug 29 1996 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | 0.0025 | 0.3 | | No | DATE: |
| Barium | | <0.005 | | | No | DATE: |
| Cadmium | | <0.005 | | | No | DATE: |
| Chromium | 748 | 0.018 | 3.8 | | No | DATE: |
| Lead | 811 | 0.0038 | 0.7 | | No | DATE: |
| Mercury | 813 | 0.00055 | 0.014 | | No | DATE: |
| Selenium | | <0.002 | | | No | DATE: |
| Silver | | <0.005 | | | No | DATE: |
| | | | | | | DATE: |
| | | | Split with City | | of Portland | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Thomas L. McCue Date: 9/13/96

form 13-1A.fil
rev. 6/24/94

SCOEPA00035672

Total Metals per EPA 200 series
Results In mg/L (ppm)

Client: Wacker Siltronic Corporation
Project:
Received: 08/27/1996

NCA Number: P608448
Matrix: water

| Sample Name | Analyte | Result | MRL | Prep Date | Analy Date |
|---|---|---|---|---|---|
| 96-92 | Arsenic | 0.0025 | 0.0020 | 08/28 | 08/29 |
| OWW composite | Barium | ND | 0.0050 | | |
| split w/city | Cadmium | ND | 0.0050 | | |
| JJR | Chromium | 0.018 | 0.0050 | | |
| | Lead | 0.0038 | 0.0020 | | |
| | Mercury | 0.00055 | 0.00020 | | |
| | Selenium | ND | 0.0020 | | |
| | Silver | ND | 0.0050 | | |
| Method Blank | Arsenic | ND | 0.0020 | | |
| | Barium | ND | 0.0050 | | |
| | Cadmium | ND | 0.0050 | | |
| | Chromium | ND | 0.0050 | | |
| | Lead | ND | 0.0020 | | |
| | Mercury | ND | 0.00020 | | |
| | Selenium | ND | 0.0020 | | |
| | Silver | ND | 0.0050 | | |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035673

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 September 1996

SAMPLING PERIOD: August 1996

TODAY'S DATE: 11 September 1996

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | Aug 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 27 Aug 96 | DATE OF SAMPLE ANAL. > | 29 Aug 96 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | 0.0025 | 0.3 | | No | DATE: |
| Barium | | < 0.005 | | | No | DATE: |
| Cadmium | | < 0.005 | | | No | DATE: |
| Chromium | 748 | 0.018 | 3.8 | | No | DATE: |
| Lead | 811 | 0.0038 | 0.7 | | No | DATE: |
| Mercury | 813 | 0.00055 | 0.014 | | No | DATE: |
| Selenium | | < 0.002 | | | No | DATE: |
| Silver | | < 0.005 | | | No | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | Split with City | | | | DATE: |
| | | | | | | DATE: |
| | | of Portland | | | | DATE: |
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| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

form 13-1A.fil
rev. 6/24/94

SCOEPA00035674

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 September 1996

SAMPLING PERIOD: August 1996

TODAY'S DATE: 6 September 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | No | pH Excursions | | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Wacker Siltronic Corp. by:

Signature: ______________________ Date: ______________________

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a <u>total</u> duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035675

WACKER
Wacker Siltronic Corporation

August 9, 1996 ER32:ES

Tim Dean
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Dean,

Enclosed is the ~~June~~ July Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild
POTW-IDR File



SCOEPA00035676

Erie Sperling 11/530

P 354 822 568

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

| | |
|---|---|
| Sent to MR TIM DEAN<br>CITY PORTLAND - ENVIR. SERV. | |
| Street & Number<br>1211 S.W. 5TH AVE - SUITE 800 | |
| Post Office, State, & ZIP Code<br>PORTLAND OR. 97204-3713 | |
| Postage | $ 1.01 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | AUG 1 3 1995 2.11 |
| Postmark or Date | |

PS Form **3800**, April 1995

SCOEPA00035677

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
MR TIM DEAN
CITY of PORTLAND - BUREAU of ENVIR. SER.
1211 S.W. 5TH AVE - SUITE 800
PORTLAND, OR. 97204-3713

4a. Article Number
P 354 822 568

4b. Service Type

| | |
|---|---|
| ☐ Registered | ☒ Certified |
| ☐ Express Mail | ☐ Insured |
| ☐ Return Receipt for Merchandise | ☐ COD |

7. Date of Delivery 16 AUG [illegible]

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811,** December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

Eric Spiesing M/S 30

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

* * * * * * * * * * * * * * * * * *
(For City Use Only)

'JSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 August 1996

SAMPLING PERIOD: July 1996

TODAY'S DATE: 8 August 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | July 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 8 July 1996 | DATE OF SAMPLE ANAL. > | 22 July 1996 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT. mg/L Daily | Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| TTO | | <0.01 | 1.37 | -- | No | DATE: |
| | | | | | | DATE: |
| Ethanol | | ND* | -- | | No | DATE: |
| | | | | | | DATE: |
| Isopropanol | | 8.2 | -- | | No | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| * ND - None detected at or above the method reporting | | | | | | DATE: |
| level. | | | | | | DATE: |
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| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Si ure: Thomas G. McLue

Date: 8/9/96

form 13-1A.fil
rev. 6/24/94

SCOEPA00035680

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation
PERMIT NUMBER: 469-001
**REPORT DUE DATE:** 15 August 1996
SAMPLING PERIOD: July 1996
TODAY'S DATE: 8 August 1996

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | Fab 2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | No pH excursions | | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: Thomas C. McCl[illegible] Date: 8/9/96

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035681

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

RECEIVED JUL 2 6 1996
JJR

July 23, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Thomas J. Rothschild

RE: JOB # 96-51, 96-52
P.O.# 46998
PROJECT -

Enclosed are test results for your samples received in this lab on Jul. 08, 1996. For your reference, these analyses have been assigned our NCA # P607083.

Solid samples are reported on a dry weight basis except for Oregon DEQ Fuels Methods and where otherwise noted.

This report will be accompanied by a separate Quality Control Data Report, unless omitted by client request.

Please call if you have any questions.

Respectfully,

Joy Chang
Project Manager

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# Alcohols by Headspace Analysis (GC/FID)

**Results In mg/L (ppm)**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P607083
**Matrix:** water
**Sampled:** 07/08/96
**Received:** 07/08/96

| Client ID | Lab ID | Analyte | Results | MRL | Date Prepared | Date Analyzed |
|---|---|---|---|---|---|---|
| 96-52 | P607083-2 | Ethanol | ND | 10 | 07/22/96 | 07/22/96 |
| Feb 2 OWW grab | | Isopropanol | 8.2 | 5.0 | | |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



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# Volatile Organic Compounds per EPA 8240

Results In ug/L (ppb)

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P607083
**Matrix:** water
**Received:** 07/08/96
**Sampled:** 07/08/96
**Prepared:** 07/11/96
**Analyzed:** 07/11/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-52 | P607083-2 | Acetone | 390 | 25 |
| Feb 2 OWW grab | | Acrolein | ND | 200 |
| | | Acrylonitrile | ND | 10 |
| | | Benzene | ND | 2.0 |
| | | Bromodichloromethane | ND | 2.0 |
| | | Bromoform | ND | 2.0 |
| | | Bromomethane | ND | 10 |
| | | 2-Butanone | ND | 25 |
| | | Carbon Disulfide | ND | 2.0 |
| | | Carbon Tetrachloride | ND | 2.0 |
| | | Chlorobenzene | ND | 2.0 |
| | | Chloroethane | ND | 10 |
| | | Chloroform | 3.7 | 2.0 |
| | | Chloromethane | ND | 10 |
| | | Dibromochloromethane | ND | 2.0 |
| | | Dibromomethane | ND | 2.0 |
| | | 1,4-Dichloro-2-butene | ND | 10 |
| | | 1,2-Dichlorobenzene | ND | 2.0 |
| | | 1,3-Dichlorobenzene | ND | 2.0 |
| | | 1,4-Dichlorobenzene | ND | 2.0 |
| | | Dichlorodifluoromethane | ND | 5.0 |
| | | 1,1-Dichloroethane | ND | 2.0 |
| | | 1,2-Dichloroethane | ND | 2.0 |
| | | 1,1-Dichloroethene | ND | 2.0 |
| | | cis-1,2-Dichloroethene | ND | 2.0 |
| | | trans1,2Dichloroethene | ND | 2.0 |
| | | 1,2-Dichloropropane | ND | 2.0 |
| | | cis-1,3-Dichloropropene | ND | 2.0 |
| | | trans1,3Dichloropropene | ND | 2.0 |
| | | Ethyl Methacrylate | ND | 2.0 |
| | | Ethylbenzene | ND | 2.0 |
| | | 2-Hexanone | ND | 5.0 |
| | | Iodomethane | ND | 2.0 |
| | | 4-Methyl-2-pentanone | ND | 5.0 |
| | | Methylene Chloride | ND | 5.0 |
| | | Styrene | ND | 2.0 |
| | | 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| | | Tetrachloroethene | ND | 2.0 |
| | | Toluene | ND | 2.0 |
| | | 1,1,1-Trichloroethane | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



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# Volatile Organic Compounds per EPA 8240

Results In ug/L (ppb)

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P607083
**Matrix:** water
**Received:** 07/08/96
**Sampled:** 07/08/96
**Prepared:** 07/11/96
**Analyzed:** 07/11/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-52 (continued) | P607083-2 | | | |
| | | 1,1,2-Trichloroethane | ND | 2.0 |
| | | Trichloroethene | ND | 2.0 |
| | | Trichlorofluoromethane | ND | 2.0 |
| | | 1,2,3-Trichloropropane | ND | 2.0 |
| | | Vinyl Acetate | ND | 5.0 |
| | | Vinyl Chloride | ND | 5.0 |
| | | Xylenes (total) | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



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## SURROGATE RECOVERIES (%)

**Client:** Wacker Siltronic Corporation
**Project:**

NCA Number: P607083
**Received:** 07/08/1996

| Sample Name | Analyte | Result | Control Limits |
|---|---|---|---|
| **Volatile Organic Compounds per EPA 8240** | | | |
| 96-51 | 4-Bromofluorobenzene | 98 | 86-115 |
| | Dibromofluoromethane | 103 | 86-118 |
| | Toluene-d8 | 101 | 88-110 |
| 96-52 | 4-Bromofluorobenzene | 98 | 86-115 |
| | Dibromofluoromethane | 101 | 86-118 |
| | Toluene-d8 | 101 | 88-110 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



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July 23, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Thomas J. Rothschild

Re: Quality Control Data
JOB # 96-51, 96-52
P.O.# 46998
PROJECT -

NCA project number P607083.

Note: Surrogate Recoveries are included in the final report.

## QUALITY CONTROL DEFINITIONS

### METHOD BLANK RESULTS

The method blank is an analyte-free matrix which is carried through the same analytical process as the samples. It is used to document contamination that may result from the analytical process.

### SURROGATE STANDARD

A surrogate standard (i.e., a chemical compound not expected to occur in an environmental sample) is added to each sample, blank, and matrix spike sample just prior to extraction or processing. The recovery of the surrogate standard is used to monitor for unusual matrix effects, gross sample processing errors, etc. Surrogate recovery is evaluated for acceptance by determining whether the measured concentration falls within accepted limits.

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Accuracy is measured by percent recovery as in:

$$\% \text{ Recovery} = \frac{\text{(Measured Concentration)}}{\text{(Actual Concentration)}} \times 100$$

Precision is measured using duplicate tests by relative percent difference.

$$\text{RPD} = \frac{\text{(Result of Test 1 - Result of Test 2)}}{\text{(Result of Test 1 + Result of Test 2)/2}} \times 100$$

If you should have any questions concerning this report, please contact me.

Sincerely,

Joy Chang
Project Manager



SCOEPA00035688

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# BATCH QUALITY CONTROL RESULTS
## Alcohols by Headspace Analysis (GC/FID)

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P607083
**Received:** 07/08/96

### METHOD BLANK
**Results In mg/L (ppm)**

| Compound | Result | MRL |
|---|---|---|
| Methanol | ND | 10 |
| Ethanol | ND | 10 |
| Isopropanol | ND | 5.0 |
| Date Analyzed | 07/22/96 | |

### LABORATORY CONTROL SAMPLE
**Results In mg/L (ppm)**

| Compound | True | Found | % Rec |
|---|---|---|---|
| Methanol | 50 | 53.0 | 106 |
| Ethanol | 50 | 50.3 | 101 |
| Isopropanol | 50 | 51.6 | 103 |

### MATRIX SPIKE AND MATRIX SPIKE DUPLICATE
**Results In mg/L (ppm)** **Spike ID P607083-2a**

| Compound | Sample Result | Amount Spiked | Spike Result | %Rec |
|---|---|---|---|---|
| Methanol | ND | 50 | 48.9 | 97.8 |
| Ethanol | ND | 50 | 49.3 | 98.6 |
| Isopropanol | 8.2 | 50 | 59.6 | 103 |

| Compound | Spike Dup Result | % Rec | RPD | QC Limit |
|---|---|---|---|---|
| Methanol | 50.0 | 100 | 2.2 | |
| Ethanol | 50.3 | 101 | 2.4 | |
| Isopropanol | 60.4 | 104 | 0.97 | |



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# BATCH QUALITY CONTROL RESULTS
## Volatile Organic Compounds per EPA 8240

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P607083
**Received:** 07/08/96

**METHOD BLANK**
**Batch # VW96025c**
**Results In ug/L (ppb)**

| Compound | Result | MRL |
|---|---|---|
| Acetone | ND | 25 |
| Acrolein | ND | 200 |
| Acrylonitrile | ND | 10 |
| Benzene | ND | 2.0 |
| Bromodichloromethane | ND | 2.0 |
| Bromoform | ND | 2.0 |
| Bromomethane | ND | 10 |
| 2-Butanone | ND | 25 |
| Carbon Disulfide | ND | 2.0 |
| Carbon Tetrachloride | ND | 2.0 |
| Chlorobenzene | ND | 2.0 |
| Chloroethane | ND | 10 |
| Chloroform | ND | 2.0 |
| Chloromethane | ND | 10 |
| Dibromochloromethane | ND | 2.0 |
| Dibromomethane | ND | 2.0 |
| 1,4-Dichloro-2-butene | ND | 10 |
| 1,2-Dichlorobenzene | ND | 2.0 |
| 1,3-Dichlorobenzene | ND | 2.0 |
| 1,4-Dichlorobenzene | ND | 2.0 |
| Dichlorodifluoromethane | ND | 5.0 |
| 1,1-Dichloroethane | ND | 2.0 |
| 1,2-Dichloroethane | ND | 2.0 |
| 1,1-Dichloroethene | ND | 2.0 |
| cis-1,2-Dichloroethene | ND | 2.0 |
| trans1,2Dichloroethene | ND | 2.0 |
| 1,2-Dichloropropane | ND | 2.0 |
| cis-1,3-Dichloropropene | ND | 2.0 |
| trans1,3Dichloropropene | ND | 2.0 |
| Ethyl Methacrylate | ND | 2.0 |
| Ethylbenzene | ND | 2.0 |
| 2-Hexanone | ND | 5.0 |
| Iodomethane | ND | 2.0 |
| 4-Methyl-2-pentanone | ND | 5.0 |
| Methylene Chloride | ND | 5.0 |
| Styrene | ND | 2.0 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| Tetrachloroethene | ND | 2.0 |
| Toluene | ND | 2.0 |
| 1,1,1-Trichloroethane | ND | 2.0 |
| 1,1,2-Trichloroethane | ND | 2.0 |
| Trichloroethene | ND | 2.0 |
| Trichlorofluoromethane | ND | 2.0 |
| 1,2,3-Trichloropropane | ND | 2.0 |
| Vinyl Acetate | ND | 5.0 |



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## BATCH QUALITY CONTROL RESULTS
### Volatile Organic Compounds per EPA 8240

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P607083
**Received:** 07/08/96

| | | |
|---|---|---|
| Vinyl Chloride | ND | 5.0 |
| Xylenes (total) | ND | 2.0 |
| Date Prepared | 07/11/96 | |
| Date Analyzed | 07/11/96 | |

| Surrogate Recovery (%) | Result | Control Limit |
|---|---|---|
| 4-Bromofluorobenzene | 100 | 86-115 |
| Dibromofluoromethane | 102 | 86-118 |
| Toluene-d8 | 101 | 88-110 |



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**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P607083
**Received:** 07/08/96

**MATRIX SPIKE AND MATRIX SPIKE DUPLICATE**
**Batch # VW96025b** **Spike ID P606445-1**
**Results In ug/L (ppb)**

| Compound | Spike Added | Sample Conc | MS Conc | MS %Rec |
|---|---|---|---|---|
| Benzene | 20 | ND | 19.8 | 99 |
| Chlorobenzene | 20 | ND | 19.0 | 95 |
| 1,1-Dichloroethene | 20 | ND | 21.1 | 106 |
| Toluene | 20 | ND | 19.0 | 95 |
| Trichloroethene | 20 | ND | 19.0 | 95 |

| Compound | Spike Added | MSD Conc | MSD % Rec | RPD | QC Limit RPD | QC Limit % Rec |
|---|---|---|---|---|---|---|
| Benzene | 20 | 19.9 | 100 | 1.0 | 11 | 76-127 |
| Chlorobenzene | 20 | 19.0 | 95 | 0 | 13 | 75-130 |
| 1,1-Dichloroethene | 20 | 21.0 | 105 | 0.95 | 14 | 61-145 |
| Toluene | 20 | 19.2 | 96 | 1.0 | 13 | 76-125 |
| Trichloroethene | 20 | 19.1 | 96 | 1.0 | 14 | 71-120 |



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# BATCH QUALITY CONTROL RESULTS
## Volatile Organic Compounds per EPA 8240

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P607083
**Received:** 07/08/96

**LABORATORY CONTROL SAMPLE**
**Batch # VW96025c**
**Results In ug/L (ppb)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Benzene | 20 | 19.9 | 100 | 76-127 |
| Chlorobenzene | 20 | 18.7 | 94 | 75-130 |
| 1,1-Dichloroethene | 20 | 20.7 | 104 | 61-145 |
| Toluene | 20 | 19.0 | 95 | 76-125 |
| Trichloroethene | 20 | 18.8 | 94 | 71-120 |



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NORTH CREEK ANALYTICAL

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East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

**Work Order #:** P607083

CLIENT: Wacker Siltronic Corporation
ADDRESS: 7200 N.W Front Avenue, Portland, Oregon 97210
PHONE: 503-243-3020 FAX: 503-241-7599

REPORT TO: Wacker Siltronic
ATTENTION: Thomas J. Rothschild
BILLING TO: Wacker Siltronic
P.O. NUMBER: 46998
NCA QUOTE #:

PROJECT NAME:
PROJECT NUMBER: 96-50 96-51
SAMPLED BY: Thomas J. Rothschild

**TURNAROUND REQUEST in Business Days ***
Organic & Inorganic Analyses: [10] [5] [3] [2] [1]
Fuels & Hydrocarbon Analyses: [5] [3] [2] [1]
[OTHER] Specify:
** Turnaround Requests less than standard may incur Rush Charges.*

| NCA SAMPLE NUMBER | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE / TIME | Analysis Request: EPA 8240 | Isopropanol | Ethanol | MATRIX (W, S, O) | # OF CONTAINERS | COMMENTS & PRESERVATIVES USED |
|---|---|---|---|---|---|---|---|---|
| | 1. 96-50 | 8 July 1996 1000 | X | | | W | 2 | HCl, Cool |
| | 2. 96-51 | ↓ | X | X | X | W | 2 | HCl, Cool |
| | 3. | | | | | | | |
| | 4. | | | | | | | |
| | 5. | | | | | | | |
| | 6. | | | | | | | |
| | 7. | | | | | | | |
| | 8. | | | | | | | |
| | 9. | | | | | | | |
| | 10. | | | | | | | |

RELINQUISHED BY: Thomas J. Rothschild DATE: 8 July 1996
PRINT NAME: Thomas J. Rothschild FIRM: Wacker TIME: 1212
RECEIVED BY: Bill Fabrizio DATE: 7/8/96
PRINT NAME: FIRM: NCA TIME: 1215

RELINQUISHED BY: Bill Fabrizio DATE:
PRINT NAME: FIRM: TIME:
RECEIVED BY: Sara McClurg DATE: 7-8-96
PRINT NAME: Sara McClurg FIRM: NCA TIME: 1430

ADDITIONAL REMARKS:

PAGE OF

COC Rev 7, 8/95

SCOEPA00035694

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 August 1996

SAMPLING PERIOD: July 1996

TODAY'S DATE: 8 August 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | July 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 8 July 1996 | DATE OF SAMPLE ANAL. > | 22 July 1996 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| TTO | | < 0.01 | 1.37 | — | No | DATE: |
| | | | | | | DATE: |
| Ethanol | | < 10 | — | | No | DATE: |
| | | | | | | DATE: |
| Isopropanol | | 8.2 | — | | No | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
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| | | | | | | DATE: |
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| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

form 13-1A.fil
rev. 6/24/94

SCOEPA00035695

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 August 1996

SAMPLING PERIOD: July 1996

TODAY'S DATE: 8 August 1996

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- x PERIODIC COMPLIANCE
- ☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | Fab2 Pipe | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | No | pH : Ex | cursions | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: ______________________ Date: ______________________

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:

1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:

The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035696

WACKER
Wacker Siltronic Corporation

July 15, 1996 ER28:ES

Tim Dean
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Santana,

Enclosed is the June Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035697

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

:DUSTRY NAME: Wacker Siltronic Corporation
:RMIT NUMBER: 469-001
:PORT DUE DATE: 15 July 1996
.MPLING PERIOD: June 1996
)DAY'S DATE: 11 July 1996

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | Feb 1 | No Excursions | | | y n | | |
| | | : | SU | | y n | | |
| | Feb 2 | No Excursions | | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in cordance with a system designed to ensure that qualified personnel properly gather and evaluate the information bmitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for thering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and mplete. I am aware that there are significant penalties for submitting false information, including the possibility fine and imprisonment for knowing violations.

gnature: _____ Date: _____

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

STRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

OLATIONS:
1. pH excursions outside your permit range for a <u>total</u> duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

AIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

• 13-1C
: 6/24/94

SCOEPA00035698

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

* * * * * * * * * * * * * * * * *
(For City Use Only)

N[illegible]RY NAME: Wacker Siltronic Corporation
ERMIT NUMBER: 469-001
EPORT DUE DATE: 15 July 1996
AMPLING PERIOD: June 1996
DDAY'S DATE: 11 July 1996

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
X PERIODIC COMPLIANCE
☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * *

| SAMPLE DATE > | June 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 6 Jun 96 | DATE OF SAMPLE ANAL. > | 6 June 1996 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic: Fab1 | 710 | < 0.002 | 0.3 | — | No | DATE: |
| Fab2 | ↓ | < 0.002 | ↓ | — | No | DATE: |
| ~~Chromium~~ Combined | ↓ | < 0.002 | ↓ | — | No | DATE: |
| ~~Cadmium~~: Fab1 | 748 | 0.007 | 3.8 | — | No | DATE: |
| Fab2 | ↓ | 0.012 | ↓ | — | No | DATE: |
| Combined | ↓ | 0.008 | ↓ | — | No | DATE: |
| Copper: Fab1 | 752 | 0.044 | 2.3 | — | No | DATE: |
| Fab2 | ↓ | 0.027 | ↓ | — | No | DATE: |
| Combined | ↓ | 0.039 | ↓ | — | No | DATE: |
| [illegible]d: Fab1 | 811 | <0.002 | 0.7 | — | No | DATE: |
| Fab2 | ↓ | 0.002 | ↓ | — | No | DATE: |
| Combined | ↓ | <0.002 | ↓ | — | No | DATE: |
| Mercury: Fab1 | 813 | 0.0002 | 0.014 | — | No | DATE: |
| Fab2 | ↓ | < 0.0002 | ↓ | — | No | DATE: |
| Combined | ↓ | 0.0002 | ↓ | — | No | DATE: |
| Nickel: Fab1 | 824 | <0.015 | 3.0 | — | No | DATE: |
| Fab2 | ↓ | <0.015 | ↓ | — | No | DATE: |
| Combined | ↓ | <0.015 | ↓ | — | No | DATE: |
| Zinc: Fab1 | 874 | 0.025 | 4.0 | — | No | DATE: |
| Fab2 | ↓ | 0.060 | ↓ | — | No | DATE: |
| Combined | ↓ | 0.033 | ↓ | — | No | DATE: |
| | | | | | | DATE: |

certify under penalty of law that this document and all attachments were prepared under my direction or supervision accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information bmitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible r gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, d complete. I am aware that there are significant penalties for submitting false information, including the ssibility of fine and imprisonment for knowing violations.

gnature: _____ Date: _____

13-[illegible]
6/24/94

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

J[illegible]RY NAME: Wacker Siltronic Corporation

ERMIT NUMBER: 469-001

REPORT DUE DATE: 15 July 1996

AMPLING PERIOD: June 1996

ODAY'S DATE: 11 July 1996

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | June 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 6 June 1996 | DATE OF SAMPLE ANAL. > | 6 June 1996 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| TTO: Fab 1 | | < 0.10 | 1.37 | – | No | DATE: |
| Fab 2 | | < 0.10 | ↓ | | No | DATE: |
| Combined | | < 0.10 | ↓ | | No | DATE: |
| Isopropynol: | | | | | | DATE: |
| Fab 1 | | 3300 | | | | DATE: |
| Fab 2 | | 9400 | | | | DATE: |
| Combined | | 5400 | | | | DATE: |
| Ethanol: Fab 1 | | < 10 | | | | DATE: |
| Fab 2 | | < 10 | | | | DATE: |
| Combined | | < 10 | | | | DATE: |
| | | | | | | DATE: |
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| | | | | | | DATE: |
| | | | | | | DATE: |

certify under penalty of law that this document and all attachments were prepared under my direction or supervision accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information bmitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible r gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, d complete. I am aware that there are significant penalties for submitting false information, including the ssibility of fine and imprisonment for knowing violations.

gnature: _____ Date: _____

13- ..fil
6/24/94

SCOEPA00035700

WACKER
Wacker Siltronic Corporation

June 24, 1996 ER24:ES

Miguel Santana
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Santana,

Per your request, enclosed is a copy of the May Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. The original was sent to you on June 13 and was recieived by your office on June 14.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Eric Spiering
Environmental Engineer

enclosure:
(1) May Industrial Discharge Report

cc: Tim Dean

Report ER23:ES was attached to this letter.

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035701

ERIC SPIELLING

Z 777 067 686

**Receipt for Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

| | |
|---|---|
| Sent to MIGUEL SANTANA<br>CITY OF PORTLAND | |
| Street and No.<br>1211 S.W. 5th AVE - STE 800 | |
| P.O., State and ZIP Code<br>PORTLAND OR. 97204 | |
| Postage | $ 1.47 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, and Addressee's Address | |
| TOTAL Postage & Fees | $ 3.67 |
| Postmark or Date | JUN 13 1996 |

RECEIVED BY SAINT JOHNS STA

USPS

PS Form **3800**, March 1993

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr Miguel Santana
Industrial Waste Mgmt.
City of Portland - Bureau Env. Serv.
1211 S.W. 5th Ave - Suite 800
Portland Or. 97204-3713

4a. Article Number
Z 777 067 686

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
14 JUN 1995

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*
X

8. Addressee's Address *(Only if requested and fee is paid)*

PS Form **3811,** December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service.

SCOEPA00035703

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

Wacker Siltronic Corp
P.O. Box 83180
Portland, Or. 97283

Eric Spalding

WACKER
Wacker Siltronic Corporation

June 12, 1996 ER23:ES

Miguel Santana
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Santana,

Enclosed is the May Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035705

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 June 1996

SAMPLING PERIOD: May 1996

TODAY'S DATE: 11 June 1996

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | May 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | | DATE OF SAMPLE ANAL. > | |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | 0.002 | 0.3 | --- | NO | **DATE:** 2 May 96 |
| Chromium | 748 | 0.008 | 3.8 | --- | NO | **DATE:** split with |
| Copper | 752 | 0.042 | 2.3 | --- | NO | **DATE:** city |
| Lead | 811 | 0.002 | 0.7 | | NO | **DATE:** |
| Mercury | 813 | 0.0002 | 0.014 | --- | NO | **DATE:** |
| Nickel | 824 | 0.015 | 3.0 | --- | NO | **DATE:** |
| Zinc | 874 | 0.049 | 4.0 | --- | NO | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| Fab 1 OWW TTO | | 0.01 | 1.37 | --- | NO | **DATE:** 2 May 96 Grab |
| | | | | | | **DATE:** |
| Fab 1 OWW Isopropanol | | 7.9 | | | | **DATE:** 2 May 96 Grab |
| | | | | | | **DATE:** |
| Fab 1 OWW Ethanol | | 10.0 | | | | **DATE:** 2 May 96 Grab |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: Thomas C. McCue Date: 6/12/96

form 13-1A.fil
rev. 6/24/94

SCOEPA00035706

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation
PERMIT NUMBER: 469-001
**REPORT DUE DATE:** 15 June 1996
SAMPLING PERIOD: May 1996
TODAY'S DATE: ~~11 June 1996~~

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
X PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | ~~Fab 1~~ | ~~NO EXCURSIONS~~ | SU | | y n | | |
| | | : | SU | | y n | | |
| | Fab 2 | NO EXCURSIONS | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: Thomas C. McClure Date: 6/12/96

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (206) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

RECEIVED MAY 21 1996

RECEIVED MAY 31 1996
JR

May 20, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Tom Rothschild

RE: JOB #
P.O.# 46998
PROJECT - TTO

Enclosed are test results for your samples received in this lab on May. 03, 1996. For your reference, these analyses have been assigned our NCA # P605049.

Solid samples are reported on a dry weight basis except for Oregon DEQ Fuels Methods and where otherwise noted.

This report will be accompanied by a separate Quality Control Data Report, unless omitted by client request.

Please call if you have any questions.

Respectfully,

Joy Chang

Joy Chang
Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (206) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

# Alcohols by Headspace Analysis (GC/FID)

**Results In mg/L (ppm)**

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Matrix:** water
**Sampled:** 05/02/96
**Received:** 05/03/96

| Client ID | Lab ID | Analyte | Results | MRL | Date Prepared | Date Analyzed |
|---|---|---|---|---|---|---|
| 96-28-OWW | P605049-2 | Ethanol | ND | 10 | 05/09/96 | 05/09/96 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035709

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (206) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

# Volatile Organic Compounds per EPA 8240

**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Matrix:** water
**Received:** 05/03/96
**Sampled:** 05/02/96
**Prepared:** 05/13/96
**Analyzed:** 05/13/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-28-OWW | P605049-2 | Acetone | 590 | 25 |
| | | Acrolein | ND | 200 |
| | | Acrylonitrile | ND | 10 |
| | | Benzene | ND | 2.0 |
| | | Bromodichloromethane | ND | 2.0 |
| | | Bromoform | ND | 2.0 |
| | | Bromomethane | ND | 10 |
| | | 2-Butanone | ND | 25 |
| | | Carbon Disulfide | ND | 2.0 |
| | | Carbon Tetrachloride | ND | 2.0 |
| | | Chlorobenzene | ND | 2.0 |
| | | Chloroethane | ND | 10 |
| | | Chloroform | 4.5 | 2.0 |
| | | Chloromethane | ND | 10 |
| | | Dibromochloromethane | ND | 2.0 |
| | | Dibromomethane | ND | 2.0 |
| | | 1,4-Dichloro-2-butene | ND | 10 |
| | | 1,2-Dichlorobenzene | ND | 2.0 |
| | | 1,3-Dichlorobenzene | ND | 2.0 |
| | | 1,4-Dichlorobenzene | ND | 2.0 |
| | | Dichlorodifluoromethane | ND | 5.0 |
| | | 1,1-Dichloroethane | ND | 2.0 |
| | | 1,2-Dichloroethane | ND | 2.0 |
| | | 1,1-Dichloroethene | ND | 2.0 |
| | | cis-1,2-Dichloroethene | ND | 2.0 |
| | | trans1,2Dichloroethene | ND | 2.0 |
| | | 1,2-Dichloropropane | ND | 2.0 |
| | | cis-1,3-Dichloropropene | ND | 2.0 |
| | | trans1,3Dichloropropene | ND | 2.0 |
| | | Ethyl Methacrylate | ND | 2.0 |
| | | Ethylbenzene | ND | 2.0 |
| | | 2-Hexanone | ND | 5.0 |
| | | Iodomethane | ND | 2.0 |
| | | 4-Methyl-2-pentanone | ND | 5.0 |
| | | Methylene Chloride | ND | 5.0 |
| | | Styrene | ND | 2.0 |
| | | 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| | | Tetrachloroethene | ND | 2.0 |
| | | Toluene | ND | 2.0 |
| | | 1,1,1-Trichloroethane | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035710

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (206) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

## Volatile Organic Compounds per EPA 8240
**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Matrix:** water
**Received:** 05/03/96
**Sampled:** 05/02/96
**Prepared:** 05/13/96
**Analyzed:** 05/13/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-28-OWW (continued) | P605049-2 | | | |
| | | 1,1,2-Trichloroethane | ND | 2.0 |
| | | Trichloroethene | ND | 2.0 |
| | | Trichlorofluoromethane | ND | 2.0 |
| | | 1,2,3-Trichloropropane | ND | 2.0 |
| | | Vinyl Acetate | ND | 5.0 |
| | | Vinyl Chloride | ND | 5.0 |
| | | Xylenes (total) | ND | 2.0 |
| | | Isopropanol | 7900 | 200 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035711

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (206) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

## SURROGATE RECOVERIES (%)

**Client:** Wacker Siltronic Corporation
**Project:** TTO

NCA Number: P605049
**Received:** 05/03/1996

| Sample Name | Analyte | Result | Control Limits |
|---|---|---|---|
| **Volatile Organic Compounds per EPA 8240** | | | |
| 96-27-FAB-1 | 4-Bromofluorobenzene | 100 | 86-115 |
| | Dibromofluoromethane | 108 | 86-118 |
| | Toluene-d8 | 103 | 88-110 |
| 96-28-OWW | 4-Bromofluorobenzene | 98 | 86-115 |
| | Dibromofluoromethane | 103 | 86-118 |
| | Toluene-d8 | 102 | 88-110 |
| 96-29-FAB-2 | 4-Bromofluorobenzene | 99 | 86-115 |
| | Dibromofluoromethane | 109 | 86-118 |
| | Toluene-d8 | 91 | 88-110 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035712

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

May 20, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Tom Rothschild

Re: Quality Control Data
JOB #
P.O.# 46998
PROJECT - TTO

NCA project number P605049.

Note: Surrogate Recoveries are included in the final report.

## QUALITY CONTROL DEFINITIONS

### METHOD BLANK RESULTS

The method blank is an analyte-free matrix which is carried through the same analytical process as the samples. It is used to document contamination that may result from the analytical process.

### SURROGATE STANDARD

A surrogate standard (i.e., a chemical compound not expected to occur in an environmental sample) is added to each sample, blank, and matrix spike sample just prior to extraction or processing. The recovery of the surrogate standard is used to monitor for unusual matrix effects, gross sample processing errors, etc. Surrogate recovery is evaluated for acceptance by determining whether the measured concentration falls within accepted limits.

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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Accuracy is measured by percent recovery as in:

$$\% \text{ Recovery} = \frac{\text{(Measured Concentration)}}{\text{(Actual Concentration)}} \times 100$$

Precision is measured using duplicate tests by relative percent difference.

$$\text{RPD} = \frac{\text{(Result of Test 1 - Result of Test 2)}}{\text{(Result of Test 1 + Result of Test 2)/2}} \times 100$$

If you should have any questions concerning this report, please contact me.

Sincerely,

Joy Chang

Joy Chang
Project Manager



SCOEPA00035714

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (206) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
## Alcohols by Headspace Analysis (GC/FID)

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Received:** 05/03/96

### METHOD BLANK
**Results In mg/L (ppm)**

| Compound | Result | MRL |
|---|---|---|
| Ethanol | ND | 10 |
| Date Analyzed | 05/09/96 | |

### LABORATORY CONTROL SAMPLE
**Results In mg/L (ppm)**

| Compound | True | Found | % Rec |
|---|---|---|---|
| Ethanol | 50 | 50.1 | 100 |



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NORTH CREEK ANALYTICAL
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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
### Alcohols by Headspace Analysis (GC/FID)

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Received:** 05/03/96

**MATRIX SPIKE AND MATRIX SPIKE DUPLICATE** **Spike ID P605049-2a**
**Results In mg/L (ppm)**

| Compound | Sample Result | Amount Spiked | Spike Result | %Rec |
|---|---|---|---|---|
| Ethanol | ND | 50 | 51.8 | 104 |

| Compound | Spike Dup Result | % Rec | RPD | QC Limit |
|---|---|---|---|---|
| Ethanol | 50.6 | 101 | 2.3 | |



SCOEPA00035716

NORTH CREEK ANALYTICAL
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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
## Volatile Organic Compounds per EPA 8240

| | | | |
|---|---|---|---|
| **Client:** | Wacker Siltronic Corporation | **NCA Project #:** | P605049 |
| **Project:** | TTO | **Received:** | 05/03/96 |

**METHOD BLANK**
**Batch # VW96017b**
**Results In ug/L (ppb)**

| Compound | Result | MRL |
|---|---|---|
| Acetone | ND | 25 |
| Acrolein | ND | 200 |
| Acrylonitrile | ND | 10 |
| Benzene | ND | 2.0 |
| Bromodichloromethane | ND | 2.0 |
| Bromoform | ND | 2.0 |
| Bromomethane | ND | 10 |
| 2-Butanone | ND | 25 |
| Carbon Disulfide | ND | 2.0 |
| Carbon Tetrachloride | ND | 2.0 |
| Chlorobenzene | ND | 2.0 |
| Chloroethane | ND | 10 |
| Chloroform | ND | 2.0 |
| Chloromethane | ND | 10 |
| Dibromochloromethane | ND | 2.0 |
| Dibromomethane | ND | 2.0 |
| 1,4-Dichloro-2-butene | ND | 10 |
| 1,2-Dichlorobenzene | ND | 2.0 |
| 1,3-Dichlorobenzene | ND | 2.0 |
| 1,4-Dichlorobenzene | ND | 2.0 |
| Dichlorodifluoromethane | ND | 5.0 |
| 1,1-Dichloroethane | ND | 2.0 |
| 1,2-Dichloroethane | ND | 2.0 |
| 1,1-Dichloroethene | ND | 2.0 |
| cis-1,2-Dichloroethene | ND | 2.0 |
| trans1,2Dichloroethene | ND | 2.0 |
| 1,2-Dichloropropane | ND | 2.0 |
| cis-1,3-Dichloropropene | ND | 2.0 |
| trans1,3Dichloropropene | ND | 2.0 |
| Ethyl Methacrylate | ND | 2.0 |
| Ethylbenzene | ND | 2.0 |
| 2-Hexanone | ND | 5.0 |
| Iodomethane | ND | 2.0 |
| 4-Methyl-2-pentanone | ND | 5.0 |
| Methylene Chloride | ND | 5.0 |
| Styrene | ND | 2.0 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| Tetrachloroethene | ND | 2.0 |
| Toluene | ND | 2.0 |
| 1,1,1-Trichloroethane | ND | 2.0 |
| 1,1,2-Trichloroethane | ND | 2.0 |
| Trichloroethene | ND | 2.0 |
| Trichlorofluoromethane | ND | 2.0 |
| 1,2,3-Trichloropropane | ND | 2.0 |
| Vinyl Acetate | ND | 5.0 |



SCOEPA00035717

NORTH CREEK ANALYTICAL
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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
### Volatile Organic Compounds per EPA 8240

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Received:** 05/03/96

| | | |
|---|---|---|
| Vinyl Chloride | ND | 5.0 |
| Xylenes (total) | ND | 2.0 |
| Date Prepared | 05/13/96 | |
| Date Analyzed | 05/13/96 | |

| Surrogate Recovery (%) | Result | Control Limit |
|---|---|---|
| 4-Bromofluorobenzene | 100 | 86-115 |
| Dibromofluoromethane | 101 | 86-118 |
| Toluene-d8 | 103 | 88-110 |



SCOEPA00035718

NORTH CREEK ANALYTICAL
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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
## Volatile Organic Compounds per EPA 8240

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Received:** 05/03/96

### MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

**Batch # VW96017a** **Spike ID P605040-5a**
**Results In ug/L (ppb)**

| Compound | Spike Added | Sample Conc | MS Conc | MS %Rec |
|---|---|---|---|---|
| Benzene | 20 | ND | 22.1 | 111 |
| Chlorobenzene | 20 | ND | 18.8 | 94 |
| 1,1-Dichloroethene | 20 | ND | 18.8 | 94 |
| Toluene | 20 | ND | 19.8 | 99 |
| Trichloroethene | 20 | ND | 17.7 | 89 |

| Compound | Spike Added | MSD Conc | MSD % Rec | RPD | QC Limit RPD | QC Limit % Rec |
|---|---|---|---|---|---|---|
| Benzene | 20 | 21.4 | 107 | 3.7 | 11 | 76-127 |
| Chlorobenzene | 20 | 18.5 | 93 | 1.1 | 13 | 75-130 |
| 1,1-Dichloroethene | 20 | 18.5 | 93 | 1.1 | 14 | 61-145 |
| Toluene | 20 | 19.4 | 97 | 2.0 | 13 | 76-125 |
| Trichloroethene | 20 | 17.4 | 87 | 2.3 | 14 | 71-120 |



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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
## Volatile Organic Compounds per EPA 8240

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Received:** 05/03/96

### LABORATORY CONTROL SAMPLE
**Batch # VW96017b**
**Results In ug/L (ppb)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Benzene | 20 | 19.5 | 98 | 76-127 |
| Chlorobenzene | 20 | 19.0 | 95 | 75-130 |
| 1,1-Dichloroethene | 20 | 15.7 | 79 | 61-145 |
| Toluene | 20 | 19.0 | 95 | 76-125 |
| Trichloroethene | 20 | 18.3 | 92 | 71-120 |



SCOEPA00035720

12.4

NORTH CREEK ANALYTICAL
18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

**Work Order #:** P605049

CLIENT: Wacker Siltronic
ADDRESS: 7200 N.W. Front Ave, Portland, OR
PHONE: 243-2020 FAX: 241-7599

REPORT TO: Tim Rothschild
ATTENTION:
BILLING TO:
P.O. NUMBER: 46998
NCA QUOTE #:

PROJECT NAME: T70
PROJECT NUMBER:
SAMPLED BY: Dianne Mullan

**TURNAROUND REQUEST in Business Days ***
Organic & Inorganic Analyses: [10] [5] [3] [2] [1]
Fuels & Hydrocarbon Analyses: [5] [3] [2] [1]
[OTHER] Specify:
** Turnaround Requests less than standard may incur Rush Charges.*

| NCA SAMPLE NUMBER | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE / TIME | Analysis Request: EPA 8260 | IPA | Ethanol | MATRIX (W, S, O) | # OF CONTAINERS | COMMENTS & PRESERVATIVES USED |
|---|---|---|---|---|---|---|---|---|
| | 1. 96-27-FAB-1 | 5-2-96/0950 | X | | | W | 2 | HCL |
| | 2. 96-28-OWW | 5-2-96/0950 | X | X | X | W | 2 | HCL |
| | 3. 96-29-FAB-2 | 5-2-96/0955 | X | | | W | 2 | HCL |
| | 4. | | | | | | | |
| | 5. | | | | | | | |
| | 6. | | | | | | | |
| | 7. | | | | | | | |
| | 8. | | | | | | | |
| | 9. | | | | | | | |
| | 10. | | | | | | | |

RELINQUISHED BY: Dianne Mullan — DATE: 5-3-96
PRINT NAME: Dianne Mullan — FIRM: Wacker Siltronic — TIME: 0900
RECEIVED BY: Paul Conroy — DATE: 5-3-96
PRINT NAME: Paul Conroy — FIRM: WCKR. — TIME: 9:00

RELINQUISHED BY: Paul Conroy — DATE: 5-3-96
PRINT NAME: Paul Conroy — FIRM: WCKR. — TIME: 10:11
RECEIVED BY: Sara McClurg — DATE: 5-3-96
PRINT NAME: Sara McClurg — FIRM: NCA — TIME: 1040

ADDITIONAL REMARKS:

PAGE OF

COC Rev 7, 8/95

SCOEPA00035721

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

RECEIVED MAY 31 1996
JJR

May 20, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Tom Rothschild

RE: JOB #
P.O.# 46998
PROJECT - OWW-SPLIT

Enclosed are test results for your samples received in this lab on May. 03, 1996. For your reference, these analyses have been assigned our NCA # P605050.

Solid samples are reported on a dry weight basis except for Oregon DEQ Fuels Methods and where otherwise noted.

This report will be accompanied by a separate Quality Control Data Report, unless omitted by client request.

Please call if you have any questions.

Respectfully,

Joy Chang
Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (206) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

# Total Metals per EPA 200 series
**Results In mg/L (ppm)**

**Client:** Wacker Siltronic Corporation
**Project:** OWW-SPLIT

**NCA Project #:** P605050
**Matrix:** water
**Sampled:** 05/03/96
**Received:** 05/03/96

| Client ID | Lab ID | Analyte | Result | MRL | Date Prepared | Date Analyzed |
|---|---|---|---|---|---|---|
| #96-26 | P605050-1 | Arsenic | ND | 0.0020 | 05/06/96 | 05/18/96 |
| | | Chromium | 0.0078 | 0.0050 | | |
| | | Copper | 0.042 | 0.0050 | | |
| | | Lead | ND | 0.0020 | | |
| | | Mercury | ND | 0.00020 | | |
| | | Nickel | ND | 0.015 | | |
| | | Zinc | 0.049 | 0.010 | | |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035723

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Accuracy is measured by percent recovery as in:

$$\% \text{ Recovery} = \frac{\text{(Measured Concentration)}}{\text{(Actual Concentration)}} \times 100$$

Precision is measured using duplicate tests by relative percent difference.

$$\text{RPD} = \frac{\text{(Result of Test 1 - Result of Test 2)}}{\text{(Result of Test 1 + Result of Test 2)/2}} \times 100$$

If you should have any questions concerning this report, please contact me.

Sincerely,

Joy Chang

Joy Chang
Project Manager



SCOEPA00035724

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (206) 481-9200 ▪ FAX 485-2992
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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Total Metals per EPA 200 Series**

**Client:** Wacker Siltronic Corporation
**Project:** OWW-SPLIT

**NCA Project #:** P605050
**Received:** 05/03/96

**METHOD BLANK**
**Batch # QW96159a**
**Results In mg/L (ppm)**

| Compound | Result | MRL |
|---|---|---|
| Arsenic | ND | 0.0020 |
| Chromium | ND | 0.0050 |
| Copper | ND | 0.0050 |
| Lead | ND | 0.0020 |
| Nickel | ND | 0.015 |
| Zinc | ND | 0.010 |
| Date Prepared | 04/26/96 | |
| Date Analyzed | 05/19/96 | |

**DUPLICATE**
**Batch # QW96159a** **Duplicate ID P605022-1**
**Results In mg/L (ppm)**

| Compound | Sample Conc | Dup Conc | RPD | QC Limit RPD |
|---|---|---|---|---|
| Arsenic (ap) | ND | ND | - | 20 |
| Chromium (ap) | ND | ND | - | 20 |
| Copper (ap) | ND | ND | - | 20 |
| Lead (ap) | ND | ND | - | 20 |
| Nickel (ap) | ND | ND | - | 20 |
| Zinc (ap) | 0.0183 | 0.0200 | - | 20 |

(ap) RPD is not reported for sample concentrations less than 5 times the MRL.



SCOEPA00035725

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Total Metals per EPA 200 Series**

**Client:** Wacker Siltronic Corporation
**Project:** OWW-SPLIT

**NCA Project #:** P605050
**Received:** 05/03/96

**MATRIX SPIKE**
**Batch # QW96159a**
**Results In mg/L (ppm)**

**Spike ID P605022-1**

| Compound | Spike Added | Sample Conc | MS Conc | MS % Rec | QC Limit % Rec |
|---|---|---|---|---|---|
| Arsenic | 0.10 | ND | 0.0886 | 89 | 70-130 |
| Chromium | 0.10 | ND | 0.100 | 100 | 70-130 |
| Copper | 0.10 | ND | 0.0952 | 95 | 70-130 |
| Lead (q) | 0.10 | ND | 0.221 | 221 | 70-130 |
| Nickel | 0.10 | ND | 0.0924 | 92 | 70-130 |
| Zinc | 0.10 | 0.0183 | 0.104 | 86 | 70-130 |

(q) Spike recovery is out of control limits due to spiking solution contamination. Data quality is not affected.

**LABORATORY CONTROL SAMPLE**
**Batch # QW96159a**
**Results In mg/L (ppm)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Arsenic | 0.10 | 0.0879 | 88 | 80-105 |
| Chromium | 0.10 | 0.0970 | 97 | 85-115 |
| Copper | 0.10 | 0.0945 | 95 | 85-115 |
| Lead (q) | 0.10 | 0.220 | 220 | 85-115 |
| Nickel | 0.10 | 0.0926 | 93 | 85-115 |
| Zinc | 0.10 | 0.0984 | 98 | 80-110 |

(q) Spike recovery is out of control limits due to spiking solution contamination. Data quality is not affected.



SCOEPA00035726

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
### Total Metals per EPA 200 Series

**Client:** Wacker Siltronic Corporation
**Project:** OWW-SPLIT

**NCA Project #:** P605050
**Received:** 05/03/96

---

**METHOD BLANK**
**Batch # ZW96059a**
**Results In mg/L (ppm)**

| Compound | Result | MRL |
|---|---|---|
| Mercury | ND | 0.00020 |
| Date Prepared | 05/08/96 | |
| Date Analyzed | 05/11/96 | |

**DUPLICATE**
**Batch # ZW96059a** **Duplicate ID P604041-1**
**Results In mg/L (ppm)**

| Compound | Sample Conc | Dup Conc | RPD | QC Limit RPD |
|---|---|---|---|---|
| Mercury (ap) | ND | ND | - | 20 |

(ap) RPD is not reported for sample concentrations less than 5 times the MRL.

**MATRIX SPIKE**
**Batch # ZW96059a** **Spike ID P605041-1**
**Results In mg/L (ppm)**

| Compound | Spike Added | Sample Conc | MS Conc | MS % Rec | QC Limit % Rec |
|---|---|---|---|---|---|
| Mercury | 0.0050 | ND | 0.0053 | 106 | 75-125 |



SCOEPA00035727

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Total Metals per EPA 200 Series**

**Client:** Wacker Siltronic Corporation
**Project:** OWW-SPLIT

**NCA Project #:** P605050
**Received:** 05/03/96

**LABORATORY CONTROL SAMPLE**
**Batch # ZW96059a**
**Results In mg/L (ppm)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Mercury | 0.0050 | 0.0053 | 106 | 82-110 |



SCOEPA00035728

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

R605050 12.4

CLIENT: Wacker Siltronic

ADDRESS: 7200 N.W. Front Ave
Portland, OR

PHONE: 243-2020 FAX: 417-4117

PROJECT NAME: DWW - Split

PROJECT NUMBER:

SAMPLED BY: Paul Marty, Dianne Mullan

REPORT TO: Tom Rothschild

BILLING TO:

P.O. NUMBER: 46998

NCA QUOTE #:

**TURNAROUND REQUEST in Business Days ***

Organic & Inorganic Analyses: [X] 10 [ ] 5 [ ] 3 [ ] 2 [ ] 1

*(Please Select One)*

Fuels & Hydrocarbon Analyses: [ ] 5 [ ] 3 [ ] 2 [ ] 1

** Turnaround Requests less than standard will incur Rush Charges.*

FAX RESULTS BY :

| | SAMPLE IDENTIFICATION: (NUMBER OR DESCRIPTION) | SAMPLING DATE / TIME | MATRIX (W,S,O) | # OF CONT. | Analysis Request: As, Cu, Cr(T), Pb, Hg, Zn, Ni | COMMENTS & PRESERVATIVES USED | NCA SAMPLE NUMBER |
|---|---|---|---|---|---|---|---|
| 1. | #96.26 | 5.3.96/1020 | W | 1 | X | 5ml HNO3 | |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |

RELINQUISHED BY: Dianne Mullan DATE: 5.3.96
PRINT NAME: Dianne Mullan FIRM: Wacker Siltronic TIME: 0900

RECEIVED BY: K. L. Stanley DATE: 5-3-96
PRINT NAME: Karin Stanley FIRM: NCA TIME: 1150

RELINQUISHED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:
C.O.C. lost - FAXING this one -

PAGE 1 OF 1

COC Rev 6, 10/94

SCOEPA00035729

**WACKER**
Wacker Siltronic Corporation

June 12, 1996 ER23:ES

Miguel Santana
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Santana,

Enclosed is the May Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 241-7532.

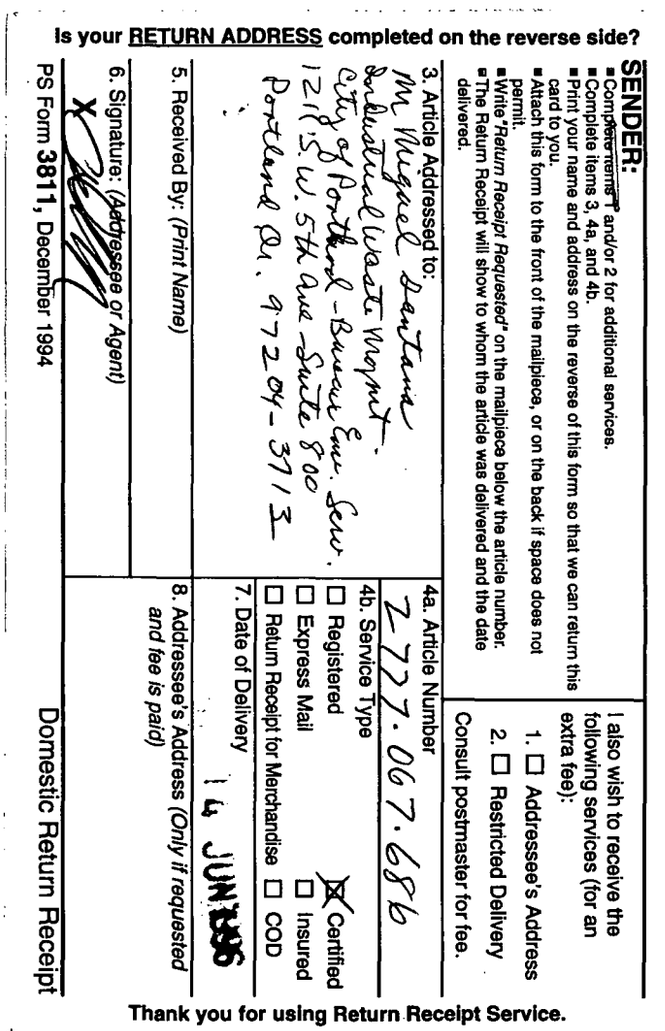
Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild






SCOEPA00035730

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

* * * * * * * * * * * * * * * * * * *

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 June 1996

SAMPLING PERIOD: May 1996

TODAY'S DATE: 11 June 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

(For City Use Only)

* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | May 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | | DATE OF SAMPLE ANAL. > | |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | 0.002 | 0.3 | --- | NO | **DATE:** 2 May 96 |
| Chromium | 748 | 0.008 | 3.8 | --- | NO | **DATE:** split with |
| Copper | 752 | 0.042 | 2.3 | --- | NO | **DATE:** city |
| Lead | 811 | 0.002 | 0.7 | | NO | **DATE:** |
| Mercury | 813 | 0.0002 | 0.014 | --- | NO | **DATE:** |
| Nickel | 824 | 0.015 | 3.0 | --- | NO | **DATE:** |
| Zinc | 874 | 0.049 | 4.0 | --- | NO | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| Fab 1 OWW TTO | | 0.01 | 1.37 | --- | NO | **DATE:** 2 May 96 Grab |
| | | | | | | **DATE:** |
| Fab 1 OWW Isopropanol | | 7.9 | | | | **DATE:** 2 May 96 Grab |
| | | | | | | **DATE:** |
| Fab 1 OWW Ethanol | | 10.0 | | | | **DATE:** 2 May 96 Grab |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |
| | | | | | | **DATE:** |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: Thomas C. McClure Date: 6/12/96

form 13-1A.fil
rev. 6/24/94

SCOEPA00035731

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation
PERMIT NUMBER: 469-001
REPORT DUE DATE: 15 June 1996
SAMPLING PERIOD: May 1996
TODAY'S DATE: ~~11 June 1996~~

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
X PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | ~~Fab 1~~ | ~~NO EXCURSIONS~~ | SU | | y n | | |
| | | : | SU | | y n | | |
| | Fab 2 | NO EXCURSIONS | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: Thomas C. McClure Date: 6/12/96

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

RECEIVED MAY 21 1996

RECEIVED MAY 31 1996

May 20, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Tom Rothschild

RE: JOB #
P.O.# 46998
PROJECT - TTO

Enclosed are test results for your samples received in this lab on May. 03, 1996. For your reference, these analyses have been assigned our NCA # P605049.

Solid samples are reported on a dry weight basis except for Oregon DEQ Fuels Methods and where otherwise noted.

This report will be accompanied by a separate Quality Control Data Report, unless omitted by client request.

Please call if you have any questions.

Respectfully,

Joy Chang

Joy Chang
Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

# Alcohols by Headspace Analysis (GC/FID)

**Results In mg/L (ppm)**

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Matrix:** water
**Sampled:** 05/02/96
**Received:** 05/03/96

| Client ID | Lab ID | Analyte | Results | MRL | Date Prepared | Date Analyzed |
|---|---|---|---|---|---|---|
| 96-28-OWW | P605049-2 | Ethanol | ND | 10 | 05/09/96 | 05/09/96 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035734

NORTH CREEK ANALYTICAL
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

# Volatile Organic Compounds per EPA 8240
**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Matrix:** water
**Received:** 05/03/96
**Sampled:** 05/02/96
**Prepared:** 05/13/96
**Analyzed:** 05/13/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-28-OWW | P605049-2 | Acetone | 590 | 25 |
| | | Acrolein | ND | 200 |
| | | Acrylonitrile | ND | 10 |
| | | Benzene | ND | 2.0 |
| | | Bromodichloromethane | ND | 2.0 |
| | | Bromoform | ND | 2.0 |
| | | Bromomethane | ND | 10 |
| | | 2-Butanone | ND | 25 |
| | | Carbon Disulfide | ND | 2.0 |
| | | Carbon Tetrachloride | ND | 2.0 |
| | | Chlorobenzene | ND | 2.0 |
| | | Chloroethane | ND | 10 |
| | | Chloroform | 4.5 | 2.0 |
| | | Chloromethane | ND | 10 |
| | | Dibromochloromethane | ND | 2.0 |
| | | Dibromomethane | ND | 2.0 |
| | | 1,4-Dichloro-2-butene | ND | 10 |
| | | 1,2-Dichlorobenzene | ND | 2.0 |
| | | 1,3-Dichlorobenzene | ND | 2.0 |
| | | 1,4-Dichlorobenzene | ND | 2.0 |
| | | Dichlorodifluoromethane | ND | 5.0 |
| | | 1,1-Dichloroethane | ND | 2.0 |
| | | 1,2-Dichloroethane | ND | 2.0 |
| | | 1,1-Dichloroethene | ND | 2.0 |
| | | cis-1,2-Dichloroethene | ND | 2.0 |
| | | trans1,2Dichloroethene | ND | 2.0 |
| | | 1,2-Dichloropropane | ND | 2.0 |
| | | cis-1,3-Dichloropropene | ND | 2.0 |
| | | trans1,3Dichloropropene | ND | 2.0 |
| | | Ethyl Methacrylate | ND | 2.0 |
| | | Ethylbenzene | ND | 2.0 |
| | | 2-Hexanone | ND | 5.0 |
| | | Iodomethane | ND | 2.0 |
| | | 4-Methyl-2-pentanone | ND | 5.0 |
| | | Methylene Chloride | ND | 5.0 |
| | | Styrene | ND | 2.0 |
| | | 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| | | Tetrachloroethene | ND | 2.0 |
| | | Toluene | ND | 2.0 |
| | | 1,1,1-Trichloroethane | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035735

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

# Volatile Organic Compounds per EPA 8240
**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Matrix:** water
**Received:** 05/03/96
**Sampled:** 05/02/96
**Prepared:** 05/13/96
**Analyzed:** 05/13/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-28-OWW (continued) | P605049-2 | | | |
| | | 1,1,2-Trichloroethane | ND | 2.0 |
| | | Trichloroethene | ND | 2.0 |
| | | Trichlorofluoromethane | ND | 2.0 |
| | | 1,2,3-Trichloropropane | ND | 2.0 |
| | | Vinyl Acetate | ND | 5.0 |
| | | Vinyl Chloride | ND | 5.0 |
| | | Xylenes (total) | ND | 2.0 |
| | | Isopropanol | 7900 | 200 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035736

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

## SURROGATE RECOVERIES (%)

**Client:** Wacker Siltronic Corporation
**Project:** TTO

NCA Number: P605049
**Received:** 05/03/1996

| Sample Name | Analyte | Result | Control Limits |
|---|---|---|---|
| **Volatile Organic Compounds per EPA 8240** | | | |
| 96-27-FAB-1 | 4-Bromofluorobenzene | 100 | 86-115 |
| | Dibromofluoromethane | 108 | 86-118 |
| | Toluene-d8 | 103 | 88-110 |
| 96-28-OWW | 4-Bromofluorobenzene | 98 | 86-115 |
| | Dibromofluoromethane | 103 | 86-118 |
| | Toluene-d8 | 102 | 88-110 |
| 96-29-FAB-2 | 4-Bromofluorobenzene | 99 | 86-115 |
| | Dibromofluoromethane | 109 | 86-118 |
| | Toluene-d8 | 91 | 88-110 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035737

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

May 20, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Tom Rothschild

Re: Quality Control Data
JOB #
P.O.# 46998
PROJECT - TTO

NCA project number P605049.

Note: Surrogate Recoveries are included in the final report.

## QUALITY CONTROL DEFINITIONS

### METHOD BLANK RESULTS

The method blank is an analyte-free matrix which is carried through the same analytical process as the samples. It is used to document contamination that may result from the analytical process.

### SURROGATE STANDARD

A surrogate standard (i.e., a chemical compound not expected to occur in an environmental sample) is added to each sample, blank, and matrix spike sample just prior to extraction or processing. The recovery of the surrogate standard is used to monitor for unusual matrix effects, gross sample processing errors, etc. Surrogate recovery is evaluated for acceptance by determining whether the measured concentration falls within accepted limits.

NORTH CREEK ANALYTICAL
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Accuracy is measured by percent recovery as in:

$$\% \text{ Recovery} = \frac{\text{(Measured Concentration)}}{\text{(Actual Concentration)}} \times 100$$

Precision is measured using duplicate tests by relative percent difference.

$$\text{RPD} = \frac{\text{(Result of Test 1 - Result of Test 2)}}{\text{(Result of Test 1 + Result of Test 2)/2}} \times 100$$

If you should have any questions concerning this report, please contact me.

Sincerely,

Joy Chang
Project Manager



SCOEPA00035739

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
Alcohols by Headspace Analysis (GC/FID)

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Received:** 05/03/96

### METHOD BLANK
**Results In mg/L (ppm)**

| Compound | Result | MRL |
|---|---|---|
| Ethanol | ND | 10 |
| Date Analyzed | 05/09/96 | |

### LABORATORY CONTROL SAMPLE
**Results In mg/L (ppm)**

| Compound | True | Found | % Rec |
|---|---|---|---|
| Ethanol | 50 | 50.1 | 100 |



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NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
### Alcohols by Headspace Analysis (GC/FID)

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Received:** 05/03/96

**MATRIX SPIKE AND MATRIX SPIKE DUPLICATE** **Spike ID P605049-2a**
**Results In mg/L (ppm)**

| Compound | Sample Result | Amount Spiked | Spike Result | %Rec |
|---|---|---|---|---|
| Ethanol | ND | 50 | 51.8 | 104 |

| Compound | Spike Dup Result | % Rec | RPD | QC Limit |
|---|---|---|---|---|
| Ethanol | 50.6 | 101 | 2.3 | |



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NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

| | | | |
|---|---|---|---|
| **Client:** | Wacker Siltronic Corporation | **NCA Project #:** | P605049 |
| **Project:** | TTO | **Received:** | 05/03/96 |

**METHOD BLANK**
**Batch # VW96017b**
**Results In ug/L (ppb)**

| Compound | Result | MRL |
|---|---|---|
| Acetone | ND | 25 |
| Acrolein | ND | 200 |
| Acrylonitrile | ND | 10 |
| Benzene | ND | 2.0 |
| Bromodichloromethane | ND | 2.0 |
| Bromoform | ND | 2.0 |
| Bromomethane | ND | 10 |
| 2-Butanone | ND | 25 |
| Carbon Disulfide | ND | 2.0 |
| Carbon Tetrachloride | ND | 2.0 |
| Chlorobenzene | ND | 2.0 |
| Chloroethane | ND | 10 |
| Chloroform | ND | 2.0 |
| Chloromethane | ND | 10 |
| Dibromochloromethane | ND | 2.0 |
| Dibromomethane | ND | 2.0 |
| 1,4-Dichloro-2-butene | ND | 10 |
| 1,2-Dichlorobenzene | ND | 2.0 |
| 1,3-Dichlorobenzene | ND | 2.0 |
| 1,4-Dichlorobenzene | ND | 2.0 |
| Dichlorodifluoromethane | ND | 5.0 |
| 1,1-Dichloroethane | ND | 2.0 |
| 1,2-Dichloroethane | ND | 2.0 |
| 1,1-Dichloroethene | ND | 2.0 |
| cis-1,2-Dichloroethene | ND | 2.0 |
| trans1,2Dichloroethene | ND | 2.0 |
| 1,2-Dichloropropane | ND | 2.0 |
| cis-1,3-Dichloropropene | ND | 2.0 |
| trans1,3Dichloropropene | ND | 2.0 |
| Ethyl Methacrylate | ND | 2.0 |
| Ethylbenzene | ND | 2.0 |
| 2-Hexanone | ND | 5.0 |
| Iodomethane | ND | 2.0 |
| 4-Methyl-2-pentanone | ND | 5.0 |
| Methylene Chloride | ND | 5.0 |
| Styrene | ND | 2.0 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| Tetrachloroethene | ND | 2.0 |
| Toluene | ND | 2.0 |
| 1,1,1-Trichloroethane | ND | 2.0 |
| 1,1,2-Trichloroethane | ND | 2.0 |
| Trichloroethene | ND | 2.0 |
| Trichlorofluoromethane | ND | 2.0 |
| 1,2,3-Trichloropropane | ND | 2.0 |
| Vinyl Acetate | ND | 5.0 |



SCOEPA00035742

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

| | | | |
|---|---|---|---|
| **Client:** | Wacker Siltronic Corporation | **NCA Project #:** | P605049 |
| **Project:** | TTO | **Received:** | 05/03/96 |

| | | |
|---|---|---|
| Vinyl Chloride | ND | 5.0 |
| Xylenes (total) | ND | 2.0 |
| Date Prepared | 05/13/96 | |
| Date Analyzed | 05/13/96 | |

| Surrogate Recovery (%) | Result | Control Limit |
|---|---|---|
| 4-Bromofluorobenzene | 100 | 86-115 |
| Dibromofluoromethane | 101 | 86-118 |
| Toluene-d8 | 103 | 88-110 |



SCOEPA00035743

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
### Volatile Organic Compounds per EPA 8240

**Client:** Wacker Siltronic Corporation
**Project:** TTO

**NCA Project #:** P605049
**Received:** 05/03/96

**MATRIX SPIKE AND MATRIX SPIKE DUPLICATE**
**Batch # VW96017a** **Spike ID P605040-5a**
**Results In ug/L (ppb)**

| Compound | Spike Added | Sample Conc | MS Conc | MS %Rec |
|---|---|---|---|---|
| Benzene | 20 | ND | 22.1 | 111 |
| Chlorobenzene | 20 | ND | 18.8 | 94 |
| 1,1-Dichloroethene | 20 | ND | 18.8 | 94 |
| Toluene | 20 | ND | 19.8 | 99 |
| Trichloroethene | 20 | ND | 17.7 | 89 |

| Compound | Spike Added | MSD Conc | MSD % Rec | RPD | QC Limit RPD | QC Limit % Rec |
|---|---|---|---|---|---|---|
| Benzene | 20 | 21.4 | 107 | 3.7 | 11 | 76-127 |
| Chlorobenzene | 20 | 18.5 | 93 | 1.1 | 13 | 75-130 |
| 1,1-Dichloroethene | 20 | 18.5 | 93 | 1.1 | 14 | 61-145 |
| Toluene | 20 | 19.4 | 97 | 2.0 | 13 | 76-125 |
| Trichloroethene | 20 | 17.4 | 87 | 2.3 | 14 | 71-120 |



SCOEPA00035744

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
### Volatile Organic Compounds per EPA 8240

**Client:** Wacker Siltronic Corporation
**Project:** TTO
**NCA Project #:** P605049
**Received:** 05/03/96

LABORATORY CONTROL SAMPLE
**Batch # VW96017b**
**Results In ug/L (ppb)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Benzene | 20 | 19.5 | 98 | 76-127 |
| Chlorobenzene | 20 | 19.0 | 95 | 75-130 |
| 1,1-Dichloroethene | 20 | 15.7 | 79 | 61-145 |
| Toluene | 20 | 19.0 | 95 | 76-125 |
| Trichloroethene | 20 | 18.3 | 92 | 71-120 |



SCOEPA00035745

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

**Work Order #:** P605049

CLIENT: Wacker Siltronic
ADDRESS: 7200 N.W. Front Ave
Portland, OR
PHONE: 243-2020 FAX: 241-7599

REPORT TO: Tim Rothschild
ATTENTION:
BILLING TO:
P.O. NUMBER: 46998
NCA QUOTE #:

PROJECT NAME: T70
PROJECT NUMBER:
SAMPLED BY: Dianne Mullan

**TURNAROUND REQUEST in Business Days ***
Organic & Inorganic Analyses: [10] [5] [3] [2] [1]
Fuels & Hydrocarbon Analyses: [5] [3] [2] [1]
[OTHER] Specify:
** Turnaround Requests less than standard may incur Rush Charges.*

| NCA SAMPLE NUMBER | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE / TIME | Analysis Request: EPA 8240 | IPA | Ethanol | MATRIX (W, S, O) | # OF CONTAINERS | COMMENTS & PRESERVATIVES USED |
|---|---|---|---|---|---|---|---|---|
| | 1. 96.27-FAB-1 | 5.2.96/0950 | X | | | W | 2 | HCL |
| | 2. 96.28-OWD | 5.2.96/0950 | X | X | X | W | 2 | HCL |
| | 3. 96.29-FAB.2 | 5.2.96/0955 | X | | | W | 2 | HCL |
| | 4. | | | | | | | |
| | 5. | | | | | | | |
| | 6. | | | | | | | |
| | 7. | | | | | | | |
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| | 10. | | | | | | | |

RELINQUISHED BY: Dianne Mullan — DATE: 5-3-96
PRINT NAME: Dianne Mullan — FIRM: Wacker Siltronic — TIME: 0920

RECEIVED BY: PAUL CONROY — DATE: 5-3-96
PRINT NAME: Paul Conroy — FIRM: WCKR. — TIME: 9:00

RELINQUISHED BY: Paul Conroy — DATE: 5-3-96
PRINT NAME: PAUL CONROY — FIRM: WCKR. — TIME: 10:41

RECEIVED BY: Sara McClurg — DATE: 5-3-96
PRINT NAME: Sara McClurg — FIRM: NCA — TIME: 1040

ADDITIONAL REMARKS:

PAGE OF

SCOEPA00035746

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

RECEIVED MAY 31 1996
JJR

May 20, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Tom Rothschild

RE: JOB #
P.O.# 46998
PROJECT - OWW-SPLIT

Enclosed are test results for your samples received in this lab on May. 03, 1996. For your reference, these analyses have been assigned our NCA # P605050.

Solid samples are reported on a dry weight basis except for Oregon DEQ Fuels Methods and where otherwise noted.

This report will be accompanied by a separate Quality Control Data Report, unless omitted by client request.

Please call if you have any questions.

Respectfully,

Joy Chang
Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

# Total Metals per EPA 200 series
**Results In mg/L (ppm)**

**Client:** Wacker Siltronic Corporation
**Project:** OWW-SPLIT

**NCA Project #:** P605050
**Matrix:** water
**Sampled:** 05/03/96
**Received:** 05/03/96

| Client ID | Lab ID | Analyte | Result | MRL | Date Prepared | Date Analyzed |
|---|---|---|---|---|---|---|
| #96-26 | P605050-1 | Arsenic | ND | 0.0020 | 05/06/96 | 05/18/96 |
| | | Chromium | 0.0078 | 0.0050 | | |
| | | Copper | 0.042 | 0.0050 | | |
| | | Lead | ND | 0.0020 | | |
| | | Mercury | ND | 0.00020 | | |
| | | Nickel | ND | 0.015 | | |
| | | Zinc | 0.049 | 0.010 | | |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035748

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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Accuracy is measured by percent recovery as in:

$$\% \text{ Recovery} = \frac{\text{(Measured Concentration)}}{\text{(Actual Concentration)}} \times 100$$

Precision is measured using duplicate tests by relative percent difference.

$$\text{RPD} = \frac{\text{(Result of Test 1 - Result of Test 2)}}{\text{(Result of Test 1 + Result of Test 2)/2}} \times 100$$

If you should have any questions concerning this report, please contact me.

Sincerely,

Joy Chang

Joy Chang
Project Manager



SCOEPA00035749

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Total Metals per EPA 200 Series**

**Client:** Wacker Siltronic Corporation
**Project:** OWW-SPLIT

**NCA Project #:** P605050
**Received:** 05/03/96

**METHOD BLANK**
**Batch # QW96159a**
**Results In mg/L (ppm)**

| Compound | Result | MRL |
|---|---|---|
| Arsenic | ND | 0.0020 |
| Chromium | ND | 0.0050 |
| Copper | ND | 0.0050 |
| Lead | ND | 0.0020 |
| Nickel | ND | 0.015 |
| Zinc | ND | 0.010 |
| Date Prepared | 04/26/96 | |
| Date Analyzed | 05/19/96 | |

**DUPLICATE**
**Batch # QW96159a** **Duplicate ID P605022-1**
**Results In mg/L (ppm)**

| Compound | Sample Conc | Dup Conc | RPD | QC Limit RPD |
|---|---|---|---|---|
| Arsenic (ap) | ND | ND | - | 20 |
| Chromium (ap) | ND | ND | - | 20 |
| Copper (ap) | ND | ND | - | 20 |
| Lead (ap) | ND | ND | - | 20 |
| Nickel (ap) | ND | ND | - | 20 |
| Zinc (ap) | 0.0183 | 0.0200 | - | 20 |

(ap) RPD is not reported for sample concentrations less than 5 times the MRL.



SCOEPA00035750

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Total Metals per EPA 200 Series**

**Client:** Wacker Siltronic Corporation
**Project:** OWW-SPLIT

**NCA Project #:** P605050
**Received:** 05/03/96

**MATRIX SPIKE**
**Batch # QW96159a**
**Results In mg/L (ppm)**

**Spike ID P605022-1**

| Compound | Spike Added | Sample Conc | MS Conc | MS % Rec | QC Limit % Rec |
|---|---|---|---|---|---|
| Arsenic | 0.10 | ND | 0.0886 | 89 | 70-130 |
| Chromium | 0.10 | ND | 0.100 | 100 | 70-130 |
| Copper | 0.10 | ND | 0.0952 | 95 | 70-130 |
| Lead (q) | 0.10 | ND | 0.221 | 221 | 70-130 |
| Nickel | 0.10 | ND | 0.0924 | 92 | 70-130 |
| Zinc | 0.10 | 0.0183 | 0.104 | 86 | 70-130 |

(q) Spike recovery is out of control limits due to spiking solution contamination. Data quality is not affected.

**LABORATORY CONTROL SAMPLE**
**Batch # QW96159a**
**Results In mg/L (ppm)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Arsenic | 0.10 | 0.0879 | 88 | 80-105 |
| Chromium | 0.10 | 0.0970 | 97 | 85-115 |
| Copper | 0.10 | 0.0945 | 95 | 85-115 |
| Lead (q) | 0.10 | 0.220 | 220 | 85-115 |
| Nickel | 0.10 | 0.0926 | 93 | 85-115 |
| Zinc | 0.10 | 0.0984 | 98 | 80-110 |

(q) Spike recovery is out of control limits due to spiking solution contamination. Data quality is not affected.



SCOEPA00035751

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Total Metals per EPA 200 Series**

**Client:** Wacker Siltronic Corporation
**Project:** OWW-SPLIT

**NCA Project #:** P605050
**Received:** 05/03/96

**METHOD BLANK**
**Batch # ZW96059a**
**Results In mg/L (ppm)**

| Compound | Result | MRL |
|---|---|---|
| Mercury | ND | 0.00020 |
| Date Prepared | 05/08/96 | |
| Date Analyzed | 05/11/96 | |

**DUPLICATE**
**Batch # ZW96059a** **Duplicate ID P604041-1**
**Results In mg/L (ppm)**

| Compound | Sample Conc | Dup Conc | RPD | QC Limit RPD |
|---|---|---|---|---|
| Mercury (ap) | ND | ND | - | 20 |

(ap) RPD is not reported for sample concentrations less than 5 times the MRL.

**MATRIX SPIKE**
**Batch # ZW96059a** **Spike ID P605041-1**
**Results In mg/L (ppm)**

| Compound | Spike Added | Sample Conc | MS Conc | MS % Rec | QC Limit % Rec |
|---|---|---|---|---|---|
| Mercury | 0.0050 | ND | 0.0053 | 106 | 75-125 |



SCOEPA00035752

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
**Total Metals per EPA 200 Series**

**Client:** Wacker Siltronic Corporation
**Project:** OWW-SPLIT

**NCA Project #:** P605050
**Received:** 05/03/96

**LABORATORY CONTROL SAMPLE**
**Batch # ZW96059a**
**Results In mg/L (ppm)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Mercury | 0.0050 | 0.0053 | 106 | 82-110 |



SCOEPA00035753

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

R605050 12.4

CLIENT: Wacker Siltronic
ADDRESS: 7200 N.W. Front Ave
Portland, OR
PHONE: 243-2020 FAX: 417-4117
PROJECT NAME: OWW - Split
PROJECT NUMBER:
SAMPLED BY: Paul Marty, Dianne Mullan

REPORT TO: Tom Rothschild
BILLING TO:
P.O. NUMBER: 46998
NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: [X] 10 [ ] 5 [ ] 3 [ ] 2 [ ] 1
(Please Select One)
Fuels & Hydrocarbon Analyses: [ ] 5 [ ] 3 [ ] 2 [ ] 1
* Turnaround Requests less than standard will incur Rush Charges.
FAX RESULTS BY :

| | SAMPLE IDENTIFICATION: (NUMBER OR DESCRIPTION) | SAMPLING DATE / TIME | MATRIX (W,S,O) | # OF CONT. | Analysis Request: As, Cu, Cr(T), Pb, Hg, Zn, Ni | COMMENTS & PRESERVATIVES USED | NCA SAMPLE NUMBER |
|---|---|---|---|---|---|---|---|
| 1. | #96.26 | 5.3.96/1020 | W | 1 | X | 5ml HNO3 | |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
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| 9. | | | | | | | |
| 10. | | | | | | | |

RELINQUISHED BY: Dianne Mullan DATE: 5.3.96
PRINT NAME: Dianne Mullan FIRM: Wacker Siltronic TIME: 0900

RECEIVED BY: Karin L. Stanley DATE: 5-3-96
PRINT NAME: Karin Stanley FIRM: NCA TIME: 1150

RELINQUISHED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:
C.O.C. lost - FAXING this one -

PAGE 1 OF 1

COC Rev 6, 10/94

SCOEPA00035754

WACKER
Wacker Siltronic Corporation

May 14, 1996 ER20:ES

Miguel Santana
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Santana,

Enclosed is the ~~January~~ APRIL Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. Wacker Siltronic has operated in compliance with the Permit for this reporting period.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION
Eric Hess
ENVIRONMENTAL ENGINEER FOR
Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

An ISO 9001 Certified Corporation

SCOEPA00035755

ERIC SPIERLING

Z 777 067 759

**Receipt for Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

| | |
|---|---|
| Sent to MIGUEL SANTANA<br>CITY OF PORTLAND-BUR. ENV. SERV | |
| Street and No.<br>1211 S.W. 5th AVE-SUITE 800 | |
| P.O. State and ZIP Code<br>PORTLAND OR. 97204 | |
| Postage | $1.70 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, and Addressee's Address | |
| TOTAL Postage & Fees | $3.90 |
| Postmark or Date | MAY 1 |

PS Form 3800, March 1993

SCOEPA00035756

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
MIGUEL SANTANA
IND. WASTE MANAGEMENT
CITY OF PORTLAND
BUREAU OF ENVIRONMENT SERV.
1211 S.W. 5TH AVE SUITE 800
PORTLAND, OR. 97204

4a. Article Number
Z 777 069 759

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
15 MAY 1996

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811,** December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service.

SCOEPA00035757

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

WACKER SILTRONIC
P.O. Box 83180
PORTLAND, OR 97283

Eric Spiegel 30

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

'STRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 MAY 1996

SAMPLING PERIOD: APRIL 1996

TODAY'S DATE: MAY 14- 1996

REPORT TYPE (CHECK ONE):

- [X] BASELINE MONITORING
- [ ] PERIODIC COMPLIANCE
- [ ] FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | FAB 1 4-9-96 FAB 2 4-15-96 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | ~~XX~~ COMPOSITE X GRAB | DATE RECEIVED AT LAB > | FAB 1 4-9-96 FAB 2 4-15-96 | DATE OF SAMPLE ANAL. > | FAB 1 4-11-96 FAB 2 4-19-96 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| FAB 1 - TTO | | < 0.016 | 1.37 | — | NO | DATE: |
| FAB 2 - TTO | | < 0.005 | 1.37 | — | NO | DATE: |
| | | | | | | DATE: |
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| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sir ure: [signature] Date: 5-14-96

form 13-1A.fil
rev. 6/24/94

SCOEPA00035759

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

| | | | |
|---|---|---|---|
| **INDUSTRY NAME:** | Wacker Siltronic Corporation | **REPORT TYPE (CHECK ONE):** | (For City Use Only) |
| **PERMIT NUMBER:** | 469-001 | ☐ BASELINE MONITORING | |
| **REPORT DUE DATE:** | 15 May 1996 | X PERIODIC COMPLIANCE | |
| **SAMPLING PERIOD:** | April 1996 | ☐ SPECIAL COMPLIANCE | |
| **TODAY'S DATE:** | May 13, 1996 | | |

| SAMPLE LOCATION> | Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | FAB 1: | : | SU | | y n | | |
| | 4/14/96 | 09 : 15 | 10.4pH SU | 65 | y (n) | | Pump failure allowed |
| | 4/14/96 | 11 : 40 | 10.4pH SU | 10 | y (n) | | process wastewater |
| | 4/14/96 | 13 : 20 | 10.4pH SU | 25 | y (n) | | to overflow to sewer |
| | | : | SU | | y n | | without treatment for |
| | | : | SU | | y n | | pH. |
| | FAB 2: | NO EXCURSIONS | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: [signature] Date: 5/14/96

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035760

**EXCEPTION REPORT**

Month April 19 96

Meter Reading
Min Sec
## ##

| Date | Time | System Down | pH | Down Time | Problem | Correction | Tech |
|---|---|---|---|---|---|---|---|
| 4-14 | 9.40-10.10<br>1320-1330<br>1130-1140 | OWW FWD pump FAB 1 | 9.9<br>10.4 | ~~40 min~~ 50 min | Pump failure | fixed pump | pm |

SCOEPA00035761

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

RECEIVED APR 25 1996

April 22, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Thomas J. Rothschild

RE: JOB #
P.O.# 46998
PROJECT -

Enclosed are test results for your samples received in this lab on Apr. 09, 1996. For your reference, these analyses have been assigned our NCA # P604144.

Solid samples are reported on a dry weight basis except for Oregon DEQ Fuels Methods and where otherwise noted.

This report will be accompanied by a separate Quality Control Data Report, unless omitted by client request.

Please call if you have any questions.

Respectfully,

Joy Chang
Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

## Alcohols by Headspace Analysis (GC/FID)
**Results In mg/L (ppm)**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Matrix:** water
**Sampled:** 04/09/96
**Received:** 04/09/96

| Client ID | Lab ID | Analyte | Results | MRL | Date Prepared | Date Analyzed |
|---|---|---|---|---|---|---|
| 96-22 OWW | P604144-1 | Ethanol | ND | 10 | 04/15/96 | 04/15/96 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035763

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

# Volatile Organic Compounds per EPA 8240

**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Matrix:** water
**Received:** 04/09/96
**Sampled:** 04/09/96
**Prepared:** 04/11/96
**Analyzed:** 04/11/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-22 OWW | P604144-1 | Acetone | 1600 | 25 |
| | | Acrolein | ND | 200 |
| | | Acrylonitrile | ND | 10 |
| | | Benzene | ND | 2.0 |
| | | Bromodichloromethane | ND | 2.0 |
| | | Bromoform | ND | 2.0 |
| | | Bromomethane | ND | 10 |
| | | 2-Butanone | ND | 25 |
| | | Carbon Disulfide | ND | 2.0 |
| | | Carbon Tetrachloride | ND | 2.0 |
| | | Chlorobenzene | ND | 2.0 |
| | | Chloroethane | ND | 10 |
| | | Chloroform | 4.9 | 2.0 |
| | | Chloromethane | ND | 10 |
| | | Dibromochloromethane | ND | 2.0 |
| | | Dibromomethane | ND | 2.0 |
| | | 1,4-Dichloro-2-butene | ND | 10 |
| | | 1,2-Dichlorobenzene | ND | 2.0 |
| | | 1,3-Dichlorobenzene | ND | 2.0 |
| | | 1,4-Dichlorobenzene | ND | 2.0 |
| | | Dichlorodifluoromethane | ND | 5.0 |
| | | 1,1-Dichloroethane | ND | 2.0 |
| | | 1,2-Dichloroethane | ND | 2.0 |
| | | 1,1-Dichloroethene | ND | 2.0 |
| | | cis-1,2-Dichloroethene | ND | 2.0 |
| | | trans1,2Dichloroethene | ND | 2.0 |
| | | 1,2-Dichloropropane | ND | 2.0 |
| | | cis-1,3-Dichloropropene | ND | 2.0 |
| | | trans1,3Dichloropropene | ND | 2.0 |
| | | Ethyl Methacrylate | ND | 2.0 |
| | | Ethylbenzene | ND | 2.0 |
| | | 2-Hexanone | ND | 5.0 |
| | | Iodomethane | ND | 2.0 |
| | | 4-Methyl-2-pentanone | ND | 5.0 |
| | | Methylene Chloride | ND | 5.0 |
| | | Styrene | ND | 2.0 |
| | | 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| | | Tetrachloroethene | ND | 2.0 |
| | | Toluene | ND | 2.0 |
| | | 1,1,1-Trichloroethane | ND | 16 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035764

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

## Volatile Organic Compounds per EPA 8240

**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Matrix:** water
**Received:** 04/09/96
**Sampled:** 04/09/96
**Prepared:** 04/11/96
**Analyzed:** 04/11/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-22 OWW (continued) | P604144-1 | | | |
| | | 1,1,2-Trichloroethane | ND | 2.0 |
| | | Trichloroethene | ND | 2.0 |
| | | Trichlorofluoromethane | ND | 2.0 |
| | | 1,2,3-Trichloropropane | ND | 2.0 |
| | | Vinyl Acetate | ND | 5.0 |
| | | Vinyl Chloride | ND | 5.0 |
| | | Xylenes (total) | ND | 2.0 |
| | | Isopropanol | 19000 | 200 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035765

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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# Volatile Organic Compounds per EPA 8240

**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Matrix:** water
**Received:** 04/09/96
**Sampled:** 04/09/96
**Prepared:** 04/11/96
**Analyzed:** 04/11/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-23 CE | P604144-2 | Acetone | 26 | 25 |
| | | Acrolein | ND | 200 |
| | | Acrylonitrile | ND | 10 |
| | | Benzene | ND | 2.0 |
| | | Bromodichloromethane | ND | 2.0 |
| | | Bromoform | ND | 2.0 |
| | | Bromomethane | ND | 10 |
| | | 2-Butanone | ND | 25 |
| | | Carbon Disulfide | ND | 2.0 |
| | | Carbon Tetrachloride | ND | 2.0 |
| | | Chlorobenzene | ND | 2.0 |
| | | Chloroethane | ND | 10 |
| | | Chloroform | 6.3 | 2.0 |
| | | Chloromethane | ND | 10 |
| | | Dibromochloromethane | ND | 2.0 |
| | | Dibromomethane | ND | 2.0 |
| | | 1,4-Dichloro-2-butene | ND | 10 |
| | | 1,2-Dichlorobenzene | ND | 2.0 |
| | | 1,3-Dichlorobenzene | ND | 2.0 |
| | | 1,4-Dichlorobenzene | ND | 2.0 |
| | | Dichlorodifluoromethane | ND | 5.0 |
| | | 1,1-Dichloroethane | ND | 2.0 |
| | | 1,2-Dichloroethane | ND | 2.0 |
| | | 1,1-Dichloroethene | ND | 2.0 |
| | | cis-1,2-Dichloroethene | ND | 2.0 |
| | | trans1,2Dichloroethene | ND | 2.0 |
| | | 1,2-Dichloropropane | ND | 2.0 |
| | | cis-1,3-Dichloropropene | ND | 2.0 |
| | | trans1,3Dichloropropene | ND | 2.0 |
| | | Ethyl Methacrylate | ND | 2.0 |
| | | Ethylbenzene | ND | 2.0 |
| | | 2-Hexanone | ND | 5.0 |
| | | Iodomethane | ND | 2.0 |
| | | 4-Methyl-2-pentanone | ND | 5.0 |
| | | Methylene Chloride | ND | 5.0 |
| | | Styrene | ND | 2.0 |
| | | 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| | | Tetrachloroethene | ND | 2.0 |
| | | Toluene | ND | 2.0 |
| | | 1,1,1-Trichloroethane | ND | 16 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



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NORTH CREEK ANALYTICAL
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

## Volatile Organic Compounds per EPA 8240
**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Matrix:** water
**Received:** 04/09/96
**Sampled:** 04/09/96
**Prepared:** 04/11/96
**Analyzed:** 04/11/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-23 CE (continued) | P604144-2 | | | |
| | | 1,1,2-Trichloroethane | ND | 2.0 |
| | | Trichloroethene | ND | 2.0 |
| | | Trichlorofluoromethane | ND | 2.0 |
| | | 1,2,3-Trichloropropane | ND | 2.0 |
| | | Vinyl Acetate | ND | 5.0 |
| | | Vinyl Chloride | ND | 5.0 |
| | | Xylenes (total) | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



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NORTH CREEK ANALYTICAL
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## SURROGATE RECOVERIES (%)

**Client:** Wacker Siltronic Corporation
**Project:**

NCA Number: P604144
**Received:** 04/09/1996

| Sample Name | Analyte | Result | Control Limits |
|---|---|---|---|
| **Volatile Organic Compounds per EPA 8240** | | | |
| 96-22 OWW | 4-Bromofluorobenzene | 99 | 86-115 |
| | Dibromofluoromethane | 99 | 86-118 |
| | Toluene-d8 | 99 | 88-110 |
| 96-23 CE | 4-Bromofluorobenzene | 102 | 86-115 |
| | Dibromofluoromethane | 104 | 86-118 |
| | Toluene-d8 | 102 | 88-110 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



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NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

April 22, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Thomas J. Rothschild

Re: Quality Control Data
JOB #
P.O.# 46998
PROJECT -

NCA project number P604144.

Note: Surrogate Recoveries are included in the final report.

## QUALITY CONTROL DEFINITIONS

### METHOD BLANK RESULTS

The method blank is an analyte-free matrix which is carried through the same analytical process as the samples. It is used to document contamination that may result from the analytical process.

### SURROGATE STANDARD

A surrogate standard (i.e., a chemical compound not expected to occur in an environmental sample) is added to each sample, blank, and matrix spike sample just prior to extraction or processing. The recovery of the surrogate standard is used to monitor for unusual matrix effects, gross sample processing errors, etc. Surrogate recovery is evaluated for acceptance by determining whether the measured concentration falls within accepted limits.

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Accuracy is measured by percent recovery as in:

$$\% \text{ Recovery} = \frac{\text{(Measured Concentration)}}{\text{(Actual Concentration)}} \times 100$$

Precision is measured using duplicate tests by relative percent difference.

$$\text{RPD} = \frac{\text{(Result of Test 1 - Result of Test 2)}}{\text{(Result of Test 1 + Result of Test 2)/2}} \times 100$$

If you should have any questions concerning this report, please contact me.

Sincerely,

Joy Chang

Joy Chang
Project Manager



SCOEPA00035770

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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# BATCH QUALITY CONTROL RESULTS
## Alcohols by Headspace Analysis (GC/FID)

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Received:** 04/09/96

### METHOD BLANK
**Results In mg/L (ppm)**

| Compound | Result | MRL |
|---|---|---|
| Methanol | ND | 10 |
| Ethanol | ND | 10 |
| Isopropanol | ND | 5.0 |
| Date Analyzed | 4/15/96 | |

### LABORATORY CONTROL SAMPLE
**Results In mg/L (ppm)**

| Compound | True | Found | % Rec |
|---|---|---|---|
| Methanol | 50 | 55.3 | 111 |
| Ethanol | 50 | 41.0 | 82 |
| Isopropanol | 50 | 46.5 | 93 |

### MATRIX SPIKE AND MATRIX SPIKE DUPLICATE
**Results In ug/L (ppb)**

**Spike ID P604144-1**

| Compound | Sample Result | Amount Spiked | Spike Result | % Rec | Spike Dup. Result |
|---|---|---|---|---|---|
| Methanol | 73.6 | 50 | 120.2 | 93.2 | 116.7 |
| Ethanol | ND | 50 | 47.3 | 94.6 | 45.0 |

| Compound | % Rec | RPD |
|---|---|---|
| Methanol | 86.2 | 7.8 |
| Ethanol | 90.0 | 5.0 |



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NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Received:** 04/09/96

**METHOD BLANK**
**Batch # VW96013b**
**Results In ug/L (ppb)**

| Compound | Result | MRL |
|---|---|---|
| Acetone | ND | 25 |
| Acrolein | ND | 200 |
| Acrylonitrile | ND | 10 |
| Benzene | ND | 2.0 |
| Bromodichloromethane | ND | 2.0 |
| Bromoform | ND | 2.0 |
| Bromomethane | ND | 10 |
| 2-Butanone | ND | 25 |
| Carbon Disulfide | ND | 2.0 |
| Carbon Tetrachloride | ND | 2.0 |
| Chlorobenzene | ND | 2.0 |
| Chloroethane | ND | 10 |
| Chloroform | ND | 2.0 |
| Chloromethane | ND | 10 |
| Dibromochloromethane | ND | 2.0 |
| Dibromomethane | ND | 2.0 |
| 1,4-Dichloro-2-butene | ND | 10 |
| 1,2-Dichlorobenzene | ND | 2.0 |
| 1,3-Dichlorobenzene | ND | 2.0 |
| 1,4-Dichlorobenzene | ND | 2.0 |
| Dichlorodifluoromethane | ND | 5.0 |
| 1,1-Dichloroethane | ND | 2.0 |
| 1,2-Dichloroethane | ND | 2.0 |
| 1,1-Dichloroethene | ND | 2.0 |
| cis-1,2-Dichloroethene | ND | 2.0 |
| trans1,2Dichloroethene | ND | 2.0 |
| 1,2-Dichloropropane | ND | 2.0 |
| cis-1,3-Dichloropropene | ND | 2.0 |
| trans1,3Dichloropropene | ND | 2.0 |
| Ethyl Methacrylate | ND | 2.0 |
| Ethylbenzene | ND | 2.0 |
| 2-Hexanone | ND | 5.0 |
| Iodomethane | ND | 2.0 |
| 4-Methyl-2-pentanone | ND | 5.0 |
| Methylene Chloride | ND | 5.0 |
| Styrene | ND | 2.0 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| Tetrachloroethene | ND | 2.0 |
| Toluene | ND | 2.0 |
| 1,1,1-Trichloroethane | ND | 2.0 |
| 1,1,2-Trichloroethane | ND | 2.0 |
| Trichloroethene | ND | 2.0 |
| Trichlorofluoromethane | ND | 2.0 |
| 1,2,3-Trichloropropane | ND | 2.0 |
| Vinyl Acetate | ND | 5.0 |



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NORTH CREEK ANALYTICAL
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Received:** 04/09/96

| | | |
|---|---|---|
| Vinyl Chloride | ND | 5.0 |
| Xylenes (total) | ND | 2.0 |
| Isopropanol | ND | 200 |
| Date Prepared | 04/11/96 | |
| Date Analyzed | 04/11/96 | |

| Surrogate Recovery (%) | Result | Control Limit |
|---|---|---|
| 4-Bromofluorobenzene | 102 | 86-115 |
| Dibromofluoromethane | 103 | 86-118 |
| Toluene-d8 | 102 | 88-110 |



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NORTH CREEK ANALYTICAL
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Received:** 04/09/96

**METHOD BLANK**
**Batch # VW96013c**
**Results In ug/L (ppb)**

| Compound | Result | MRL |
|---|---|---|
| Acetone | ND | 25 |
| Acrolein | ND | 200 |
| Acrylonitrile | ND | 10 |
| Benzene | ND | 2.0 |
| Bromodichloromethane | ND | 2.0 |
| Bromoform | ND | 2.0 |
| Bromomethane | ND | 10 |
| 2-Butanone | ND | 25 |
| Carbon Disulfide | ND | 2.0 |
| Carbon Tetrachloride | ND | 2.0 |
| Chlorobenzene | ND | 2.0 |
| Chloroethane | ND | 10 |
| Chloroform | ND | 2.0 |
| Chloromethane | ND | 10 |
| Dibromochloromethane | ND | 2.0 |
| Dibromomethane | ND | 2.0 |
| 1,4-Dichloro-2-butene | ND | 10 |
| 1,2-Dichlorobenzene | ND | 2.0 |
| 1,3-Dichlorobenzene | ND | 2.0 |
| 1,4-Dichlorobenzene | ND | 2.0 |
| Dichlorodifluoromethane | ND | 5.0 |
| 1,1-Dichloroethane | ND | 2.0 |
| 1,2-Dichloroethane | ND | 2.0 |
| 1,1-Dichloroethene | ND | 2.0 |
| cis-1,2-Dichloroethene | ND | 2.0 |
| trans1,2Dichloroethene | ND | 2.0 |
| 1,2-Dichloropropane | ND | 2.0 |
| cis-1,3-Dichloropropene | ND | 2.0 |
| trans1,3Dichloropropene | ND | 2.0 |
| Ethyl Methacrylate | ND | 2.0 |
| Ethylbenzene | ND | 2.0 |
| 2-Hexanone | ND | 5.0 |
| Iodomethane | ND | 2.0 |
| 4-Methyl-2-pentanone | ND | 5.0 |
| Methylene Chloride | ND | 5.0 |
| Styrene | ND | 2.0 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| Tetrachloroethene | ND | 2.0 |
| Toluene | ND | 2.0 |
| 1,1,1-Trichloroethane | ND | 2.0 |
| 1,1,2-Trichloroethane | ND | 2.0 |
| Trichloroethene | ND | 2.0 |
| Trichlorofluoromethane | ND | 2.0 |
| 1,2,3-Trichloropropane | ND | 2.0 |
| Vinyl Acetate | ND | 5.0 |



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**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Received:** 04/09/96

| | | |
|---|---|---|
| Vinyl Chloride | ND | 5.0 |
| Xylenes (total) | ND | 2.0 |
| Isopropanol | ND | 200 |
| Date Prepared | 04/12/96 | |
| Date Analyzed | 04/12/96 | |

| Surrogate Recovery (%) | Result | Control Limit |
|---|---|---|
| 4-Bromofluorobenzene | 101 | 86-115 |
| Dibromofluoromethane | 104 | 86-118 |
| Toluene-d8 | 102 | 88-110 |



SCOEPA00035775

NORTH CREEK ANALYTICAL
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**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Received:** 04/09/96

**MATRIX SPIKE AND MATRIX SPIKE DUPLICATE**
**Batch # VW96013a** **Spike ID P604022-11**
**Results In ug/L (ppb)**

| Compound | Spike Added | Sample Conc | MS Conc | MS %Rec |
|---|---|---|---|---|
| Benzene | 20 | ND | 20.5 | 103 |
| Chlorobenzene | 20 | ND | 17.8 | 89 |
| 1,1-Dichloroethene | 20 | ND | 18.9 | 95 |
| Toluene | 20 | ND | 18.0 | 90 |
| Trichloroethene | 20 | ND | 17.1 | 86 |

| Compound | Spike Added | MSD Conc | MSD % Rec | RPD | QC Limit RPD | QC Limit % Rec |
|---|---|---|---|---|---|---|
| Benzene | 20 | 21.0 | 105 | 1.9 | 11 | 76-127 |
| Chlorobenzene | 20 | 18.4 | 92 | 3.3 | 13 | 75-130 |
| 1,1-Dichloroethene | 20 | 19.3 | 97 | 2.1 | 14 | 61-145 |
| Toluene | 20 | 18.2 | 91 | 1.1 | 13 | 76-125 |
| Trichloroethene | 20 | 17.2 | 86 | 0 | 14 | 71-120 |



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NORTH CREEK ANALYTICAL
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Received:** 04/09/96

**LABORATORY CONTROL SAMPLE**
**Batch # VW96013b**
**Results In ug/L (ppb)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Benzene | 20 | 20.4 | 102 | 76-127 |
| Chlorobenzene | 20 | 17.8 | 89 | 75-130 |
| 1,1-Dichloroethene | 20 | 18.0 | 90 | 61-145 |
| Toluene | 20 | 18.2 | 91 | 76-125 |
| Trichloroethene | 20 | 16.8 | 84 | 71-120 |



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NORTH CREEK ANALYTICAL
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**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604144
**Received:** 04/09/96

**LABORATORY CONTROL SAMPLE**
**Batch # VW96013c**
**Results In ug/L (ppb)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Benzene | 20 | 20.1 | 101 | 76-127 |
| Chlorobenzene | 20 | 17.9 | 90 | 75-130 |
| 1,1-Dichloroethene | 20 | 18.1 | 91 | 61-145 |
| Toluene | 20 | 18.1 | 91 | 76-125 |
| Trichloroethene | 20 | 17.0 | 85 | 71-120 |



SCOEPA00035778

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

**Work Order #:** PE04144 KLS ~~PE04148~~

CLIENT: Wacker Siltronic Corporation
ADDRESS: 7200 N.W. Front Avenue Portland, Oregon 97210
PHONE: 243-2020 FAX: 241-7599

REPORT TO: Wacker Siltronic
ATTENTION: Thomas J. Rothschild
BILLING TO: Wacker Siltronic
P.O. NUMBER: 46998
NCA QUOTE #:

PROJECT NAME:
PROJECT NUMBER:
SAMPLED BY: Thomas J. Rothschild

**TURNAROUND REQUEST in Business Days ***

Organic & Inorganic Analyses: ~~10~~ | 5 | 3 | 2 | 1

Fuels & Hydrocarbon Analyses: 5 | 3 | 2 | 1

OTHER Specify:

** Turnaround Requests less than standard may incur Rush Charges.*

| NCA SAMPLE NUMBER KLS | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE / TIME | Analysis Request: EPA 8240 | HSA | Ethanol | MATRIX (W, S, O) | # OF CONTAINERS | COMMENTS & PRESERVATIVES USED |
|---|---|---|---|---|---|---|---|---|
| KLS ~~PE04148~~ -1 | 1. 96-22 OWW | 9Apr96/0830 | X | X | X | W | 2 | HCl, Cool |
| PE04144-2 | 2. 96-23 CE | 9April6/0830 | X | | | W | 2 | HCl, Cool |
| | 3. | | | | | | | |
| | 4. | | | | | | | |
| | 5. | | | | | | | |
| | 6. | | | | | | | |
| | 7. | | | | | | | |
| | 8. | | | | | | | |
| | 9. | | | | | | | |
| | 10. | | | | | | | |

RELINQUISHED BY: Thomas J. Rothschild DATE: 9 April6
PRINT NAME: Thomas J. Rothschild FIRM: Wacker TIME: 0945

RECEIVED BY: K Lisa Stanley DATE: 4-9-96
PRINT NAME: Karin L. Stanley FIRM: NCA TIME: 1455

RELINQUISHED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

PAGE OF

COC Rev 7, 8/95

SCOEPA00035779

NORTH CREEK ANALYTICAL
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RECEIVED APR 25 1996
JJR

April 23, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Thomas Rothschild

RE: JOB # 96-24
P.O.# 60068
PROJECT -

Enclosed are test results for your samples received in this lab on Apr. 15, 1996. For your reference, these analyses have been assigned our NCA # P604224.

Solid samples are reported on a dry weight basis except for Oregon DEQ Fuels Methods and where otherwise noted.

This report will be accompanied by a separate Quality Control Data Report, unless omitted by client request.

Please call if you have any questions.

Respectfully,

Joy Chang

Joy Chang
Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

# Volatile Organic Compounds per EPA 8240
**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604224
**Matrix:** water
**Received:** 04/15/96
**Sampled:** 04/15/96
**Prepared:** 04/19/96
**Analyzed:** 04/19/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-24 Fab 2 | P604224-1 | Acetone | ND | 25 |
| | | Acrolein | ND | 200 |
| | | Acrylonitrile | ND | 10 |
| | | Benzene | ND | 2.0 |
| | | Bromodichloromethane | ND | 2.0 |
| | | Bromoform | ND | 2.0 |
| | | Bromomethane | ND | 10 |
| | | 2-Butanone | ND | 25 |
| | | Carbon Disulfide | ND | 2.0 |
| | | Carbon Tetrachloride | ND | 2.0 |
| | | Chlorobenzene | ND | 2.0 |
| | | Chloroethane | ND | 10 |
| | | Chloroform | ND | 2.0 |
| | | Chloromethane | ND | 10 |
| | | Dibromochloromethane | ND | 2.0 |
| | | Dibromomethane | ND | 2.0 |
| | | 1,4-Dichloro-2-butene | ND | 10 |
| | | 1,2-Dichlorobenzene | ND | 2.0 |
| | | 1,3-Dichlorobenzene | ND | 2.0 |
| | | 1,4-Dichlorobenzene | ND | 2.0 |
| | | Dichlorodifluoromethane | ND | 5.0 |
| | | 1,1-Dichloroethane | ND | 2.0 |
| | | 1,2-Dichloroethane | ND | 2.0 |
| | | 1,1-Dichloroethene | ND | 2.0 |
| | | cis-1,2-Dichloroethene | ND | 2.0 |
| | | trans1,2Dichloroethene | ND | 2.0 |
| | | 1,2-Dichloropropane | ND | 2.0 |
| | | cis-1,3-Dichloropropene | ND | 2.0 |
| | | trans1,3Dichloropropene | ND | 2.0 |
| | | Ethyl Methacrylate | ND | 2.0 |
| | | Ethylbenzene | ND | 2.0 |
| | | 2-Hexanone | ND | 5.0 |
| | | Iodomethane | ND | 2.0 |
| | | 4-Methyl-2-pentanone | ND | 5.0 |
| | | Methylene Chloride | ND | 5.0 |
| | | Styrene | ND | 2.0 |
| | | 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| | | Tetrachloroethene | ND | 2.0 |
| | | Toluene | ND | 2.0 |
| | | 1,1,1-Trichloroethane | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035781

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

# Volatile Organic Compounds per EPA 8240
**Results In ug/L (ppb)**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604224
**Matrix:** water
**Received:** 04/15/96
**Sampled:** 04/15/96
**Prepared:** 04/19/96
**Analyzed:** 04/19/96

| Client ID | Lab ID | Analyte | Result | MRL |
|---|---|---|---|---|
| 96-24 Fab 2 (continued) | P604224-1 | | | |
| | | 1,1,2-Trichloroethane | ND | 2.0 |
| | | Trichloroethene | ND | 2.0 |
| | | Trichlorofluoromethane | ND | 2.0 |
| | | 1,2,3-Trichloropropane | ND | 2.0 |
| | | Vinyl Acetate | ND | 5.0 |
| | | Vinyl Chloride | ND | 5.0 |
| | | Xylenes (total) | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035782

NORTH CREEK ANALYTICAL
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**SURROGATE RECOVERIES (%)**

**Client:** Wacker Siltronic Corporation
**Project:**

NCA Number: P604224
**Received:** 04/15/1996

| Sample Name | Analyte | Result | Control Limits |
|---|---|---|---|
| **Volatile Organic Compounds per EPA 8240** | | | |
| 96-24 Fab 2 | 4-Bromofluorobenzene | 102 | 86-115 |
| | Dibromofluoromethane | 103 | 86-118 |
| | Toluene-d8 | 100 | 88-110 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035783

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

April 23, 1996

Wacker Siltronic Corporation
7200 N.W. Front
Portland, OR 97210

Attention: Thomas Rothschild

Re: Quality Control Data
JOB # 96-24
P.O.# 60068
PROJECT -

NCA project number P604224.

Note: Surrogate Recoveries are included in the final report.

## QUALITY CONTROL DEFINITIONS

### METHOD BLANK RESULTS

The method blank is an analyte-free matrix which is carried through the same analytical process as the samples. It is used to document contamination that may result from the analytical process.

### SURROGATE STANDARD

A surrogate standard (i.e., a chemical compound not expected to occur in an environmental sample) is added to each sample, blank, and matrix spike sample just prior to extraction or processing. The recovery of the surrogate standard is used to monitor for unusual matrix effects, gross sample processing errors, etc. Surrogate recovery is evaluated for acceptance by determining whether the measured concentration falls within accepted limits.

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

Accuracy is measured by percent recovery as in:

$$\% \text{ Recovery} = \frac{\text{(Measured Concentration)}}{\text{(Actual Concentration)}} \times 100$$

Precision is measured using duplicate tests by relative percent difference.

$$\text{RPD} = \frac{\text{(Result of Test 1 - Result of Test 2)}}{\text{(Result of Test 1 + Result of Test 2)/2}} \times 100$$

If you should have any questions concerning this report, please contact me.

Sincerely,

Joy Chang

Joy Chang
Project Manager



SCOEPA00035785

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604224
**Received:** 04/15/96

**METHOD BLANK**
**Batch # VW96014b**
**Results In ug/L (ppb)**

| Compound | Result | MRL |
|---|---|---|
| Acetone | ND | 25 |
| Acrolein | ND | 200 |
| Acrylonitrile | ND | 10 |
| Benzene | ND | 2.0 |
| Bromodichloromethane | ND | 2.0 |
| Bromoform | ND | 2.0 |
| Bromomethane | ND | 10 |
| 2-Butanone | ND | 25 |
| Carbon Disulfide | ND | 2.0 |
| Carbon Tetrachloride | ND | 2.0 |
| Chlorobenzene | ND | 2.0 |
| Chloroethane | ND | 10 |
| Chloroform | ND | 2.0 |
| Chloromethane | ND | 10 |
| Dibromochloromethane | ND | 2.0 |
| Dibromomethane | ND | 2.0 |
| 1,4-Dichloro-2-butene | ND | 10 |
| 1,2-Dichlorobenzene | ND | 2.0 |
| 1,3-Dichlorobenzene | ND | 2.0 |
| 1,4-Dichlorobenzene | ND | 2.0 |
| Dichlorodifluoromethane | ND | 5.0 |
| 1,1-Dichloroethane | ND | 2.0 |
| 1,2-Dichloroethane | ND | 2.0 |
| 1,1-Dichloroethene | ND | 2.0 |
| cis-1,2-Dichloroethene | ND | 2.0 |
| trans1,2Dichloroethene | ND | 2.0 |
| 1,2-Dichloropropane | ND | 2.0 |
| cis-1,3-Dichloropropene | ND | 2.0 |
| trans1,3Dichloropropene | ND | 2.0 |
| Ethyl Methacrylate | ND | 2.0 |
| Ethylbenzene | ND | 2.0 |
| 2-Hexanone | ND | 5.0 |
| Iodomethane | ND | 2.0 |
| 4-Methyl-2-pentanone | ND | 5.0 |
| Methylene Chloride | ND | 5.0 |
| Styrene | ND | 2.0 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| Tetrachloroethene | ND | 2.0 |
| Toluene | ND | 2.0 |
| 1,1,1-Trichloroethane | ND | 2.0 |
| 1,1,2-Trichloroethane | ND | 2.0 |
| Trichloroethene | ND | 2.0 |
| Trichlorofluoromethane | ND | 2.0 |
| 1,2,3-Trichloropropane | ND | 2.0 |
| Vinyl Acetate | ND | 5.0 |



SCOEPA00035786

NORTH CREEK ANALYTICAL
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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604224
**Received:** 04/15/96

| | | |
|---|---|---|
| Vinyl Chloride | ND | 5.0 |
| Xylenes (total) | ND | 2.0 |
| Date Prepared | 04/19/96 | |
| Date Analyzed | 04/19/96 | |

| Surrogate Recovery (%) | Result | Control Limit |
|---|---|---|
| 4-Bromofluorobenzene | 103 | 86-115 |
| Dibromofluoromethane | 103 | 86-118 |
| Toluene-d8 | 102 | 88-110 |



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NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604224
**Received:** 04/15/96

**MATRIX SPIKE AND MATRIX SPIKE DUPLICATE**
**Batch # VW96014a** **Spike ID P604176-1i**
**Results In ug/L (ppb)**

| Compound | Spike Added | Sample Conc | MS Conc | MS %Rec |
|---|---|---|---|---|
| Benzene | 20 | ND | 20.5 | 103 |
| Chlorobenzene | 20 | ND | 18.8 | 94 |
| 1,1-Dichloroethene | 20 | ND | 18.5 | 93 |
| Toluene | 20 | ND | 18.6 | 93 |
| Trichloroethene | 20 | ND | 18.0 | 90 |

| Compound | Spike Added | MSD Conc | MSD % Rec | RPD | QC Limit RPD | QC Limit % Rec |
|---|---|---|---|---|---|---|
| Benzene | 20 | 20.6 | 103 | 0 | 11 | 76-127 |
| Chlorobenzene | 20 | 19.0 | 95 | 1.1 | 13 | 75-130 |
| 1,1-Dichloroethene | 20 | 18.4 | 92 | 1.1 | 14 | 61-145 |
| Toluene | 20 | 18.8 | 94 | 1.1 | 13 | 76-125 |
| Trichloroethene | 20 | 18.2 | 91 | 1.1 | 14 | 71-120 |



SCOEPA00035788

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

**BATCH QUALITY CONTROL RESULTS**
**Volatile Organic Compounds per EPA 8240**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P604224
**Received:** 04/15/96

**LABORATORY CONTROL SAMPLE**
**Batch # VW96014b**
**Results In ug/L (ppb)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Benzene | 20 | 20.6 | 103 | 76-127 |
| Chlorobenzene | 20 | 19.0 | 95 | 75-130 |
| 1,1-Dichloroethene | 20 | 18.6 | 93 | 61-145 |
| Toluene | 20 | 18.6 | 93 | 76-125 |
| Trichloroethene | 20 | 18.0 | 90 | 71-120 |



SCOEPA00035789

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX :992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

**Work Order #:** P604224

16.5

CLIENT: Wacker Siltronic Corporation
ADDRESS: 7200 N.W. Front Avenue
Portland, Oregon 97210
PHONE: 243-2020 Ex 7374 FAX: 241-7549

REPORT TO: Wacker Siltronic
ATTENTION: Thomas J. Rothschild
BILLING TO: Wacker Siltronic
P.O. NUMBER: 46998
NCA QUOTE #:

PROJECT NAME:
PROJECT NUMBER: 96-24
SAMPLED BY: Thomas J. Rothschild

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: [10] 5 3 2 1
Fuels & Hydrocarbon Analyses: 5 3 2 1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

| NCA SAMPLE NUMBER | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE / TIME | Analysis Request: EPA 8240 | MATRIX (W, S, O) | # OF CONTAINERS | COMMENTS & PRESERVATIVES USED |
|---|---|---|---|---|---|---|
| | 1. 96-24 Feb2 | 15 Apr 96 1100 | X | W | 2 | Cool, HCl |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |
| | 5. | | | | | |
| | 6. | | | | | |
| | 7. | | | | | |
| | 8. | | | | | |
| | 9. | | | | | |
| | 10. | | | | | |

RELINQUISHED BY: Thomas J. Rothschild DATE: 15 Apr 96
PRINT NAME: Thomas J. Rothschild FIRM: Wacker TIME: 1150
RECEIVED BY: P. Conroy DATE: 4-15-96
PRINT NAME: P. CONROY FIRM: WACKER TIME: 1240

RELINQUISHED BY: P. Conroy DATE: 4-15-96
PRINT NAME: P. CONROY FIRM: WACKER TIME: 1430
RECEIVED BY: Sara McClung DATE: 4-15-96
PRINT NAME: Sara McClung FIRM: NCA TIME: 1430

ADDITIONAL REMARKS:

PAGE OF

COC Rev 7, 8/95

SCOEPA00035790

April 12, 1996 ER017-96:TM

Industrial Source Control Division
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 SW Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Sir or Madam:

Enclosed is the March Industrial Discharge Report for Wacker Siltronic Corporation Municipal; Discharge Permit 469-01.

If you have any questions, please contact Tom McCue at 241-7532.

Sincerely,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

cc: Tom Rothschild

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 April 1996

SAMPLING PERIOD: March 1996

TODAY'S DATE: 9 April 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE DATE > | 28 Mar 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 28 Mar '96 | DATE OF SAMPLE ANAL. > | 28 Mar '96 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Oil & Grease Non Polar | 915 | 0.94 | 100.0 | | NO | DATE: |
| Oil & Grease Polar | 914 | 13.06 | 500.0 | | NO | DATE: |
| COD | | 52 | | | NO | DATE: |
| BOD | 729 | 92.8 | 300 | | NO | DATE: |
| TSS | 857 | 259 | 350 | | NO | DATE: |
| Total Solids | | 1.7 | | | NO | DATE: |
| | | | | | | DATE: |
| | | Split with City of Portland - Fab 1 | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
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| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: _____ Date: _____

form 13-1A.fil
rev. 6/24/94

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

* * * * * * * * * * * * * * * * *
(For City Use Only)

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 April 1996

SAMPLING PERIOD: March 1996

TODAY'S DATE: 9 April 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

x PERIODIC COMPLIANCE

☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | ~~NO EXCURSIONS FAB1~~ | SU | | y n | | |
| | | : | SU | | y n | | |
| | | NO EXCURSIONS FAB2 : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: ______________________ Date: ______________________

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

Oil & grease, polar/non-polar, per EPA 413.2, EPA 418.1
Results In mg/L (ppm)

Client: Wacker Siltronic Corporation
Project: OWW
Received: 03/29/1996

NCA Number: P603346
Matrix: water

| Sample Name | Analyte | Result | MRL |
|---|---|---|---|
| 96-21 OWW Split with City | Oil & Grease | 14 | 0.50 |
| | Non-polar Hydrocarbons | 0.94 | 0.50 |
| | Polar Hydrocarbons by Difference | 13.06 | -- |
| | Date Prepped | 04/03/96 | |
| | Date Analyzed | 04/04/96 | |
| Method Blank | Oil & Grease | ND | 0.50 |
| | Non-polar Hydrocarbons | ND | 0.50 |
| | Polar Hydrocarbons by Difference | ND | -- |

4/14/96 LMW

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report

** 560-1

FROM :NORTH CREEK ANALYTICAL TO : 15032417599 1996.04-04 04:42PM #010 P.02

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 April 1996

SAMPLING PERIOD: March 1996

TODAY'S DATE: 9 April 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE DATE > | 28 Mar 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 28 Mar 1996 | DATE OF SAMPLE ANAL. > | 28 Mar 96 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | Monthly | DISCHARGE VIOLATION ? YES OR NO | COMMENTS |
|---|---|---|---|---|---|---|
| Oil and Grease Non Polar | 915 | 0.94 | 100.0 | | No | DATE: |
| ↓ Polar | 914 | 13.06 | 500.0 | | No | DATE: |
| COD | | 52 | | | No | DATE: |
| BOD | 729 | 92.8 | 300 | | No | DATE: |
| TSS | 857 | 259 | 350 | | No | DATE: |
| Total Solids | | 1.7 | | | No | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | Split with City of Portland | | | | DATE: |
| | | (Fab 1) | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP.

Signature: _____ Date: _____

form 13-1A.fil
rev. 6/24/94

SCOEPA00035795

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation
PERMIT NUMBER: 469-001
**REPORT DUE DATE:** 15 April 1996
SAMPLING PERIOD: March 1996
TODAY'S DATE: 9 April 1996

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | No Excursions | SU | Fab 1 | y n | | |
| | | : | | SU | y n | | |
| | | No Excursions | SU | Fab 2 | y n | | |
| | | [illegible, struck through] | | | | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Wacker Siltronic Corp. By:

Signature: ______________________ Date: ______________________

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

BENCHSHEET

Chemical Oxygen Demand (COD)

Date: 3-28-96 Sample Date: 3-28-96 Analyst: DM

COD Reactor Temperature: 150 C

Time In / Out: 1100 / 1300 (2 Hour Digestion)

1. DR/3000 Procedure Code 0.15, stored program 103.
2. Zero the DR/3000 with an RODI H20 blank.
3. Check the 30mg/L standard: 29 mg/L (Range: 28 - 32 mg/L)
4. CE (composite): _____ mg/L.
5. OWW (composite): Direct DR/3000 reading: 26 mg/L

   (Dilution: 25 ml in 25 ml RODI H20)

   X 2 (Dilution Factor) = 52 mg/L

Comments: OWW 24 hr. composite sample split with the city of Portland.

TJR 31 Dec 91
TJR 19 Aug 94 Revised
DEM 05 Mar 96 Revised

SCOEPA00035797

BENCHSHEET

TOTAL SUSPENDED SOLIDS (TSS)

Sample Date: 3-28-96 Oven Temp: 105 C Analyst: DM

Date In: 3-28-96 Time In/Out: 1145 / 1315

| Sample | Vol, ml | Gross Wt, g | Tare Wt, g | TSS, mg/L |
|---|---|---|---|---|
| 1. Blank | NA | 0.0900 | 0.0900 | |
| 2. CE | 200 | | | |
| 3. CE | 200 | | | |
| | | | Average CE TSS | |
| 4. OWW | 50 | 0.1025 | 0.0892 | 266 |
| 5. OWW | 50 | 0.1020 | 0.0894 | 252 |
| | | | Average OWW TSS | 259 |
| 6. | | | | |
| 7. | | | | |
| | | | Average TSS | |
| 8. | | | | |
| 9. | | | | |
| | | | Average TSS | |

Notes: pH: 10.0 / Oww 24 hr. composite) sample split with the city of Portland.

Calculation: TSS, mg/L = $\frac{\text{(Gross Wt, mg - Tare Wt, mg) X 1000}}{\text{Volume of Sample, ml}}$

Reference: Standard Methods for the Examination of Water and Wastewater, 1992, 18th Edition, Section 2540 D, page 2-56.

TJR 21 Mar 87

SCOEPA00035798

# BENCHSHEET

## TOTAL SOLIDS (TS)

Sample Date: 3.28.96 Date In: 3.28.96 Analyst: DM

Oven Temp: 107 Time In/Out: 1500 / 3.29.96 / 0730

| Dish#/Sample | Vol, ml | Gross Wt. g | Tare Wt. g | TS, mg/L |
|---|---|---|---|---|
| 1 / OWW | 100 | 97.02 | 96.85 | 1.7 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Notes: OWW 24 hr. composite split with the City of Portland

Calculations:

$$\text{TS mg/L} \equiv \frac{(\text{Gross Wt} - \text{Tare Wt}) \times 1000}{\text{Sample Vol., mls}}$$

Where:

Gross Wt = wt of dried residue, g + dish, g.
Tare Wt = wt of dish, g.

References: Standard Methods for the Examination of Water and Wastewater, 1995, 19th Ed., Sec. 2540 C. pg. 2-55.

DEM 06 Nov 95
DEM 09 Nov 95
DEM 28 Mar 96

SCOEPA00035799

BENCHSHEET

BIOCHEMICAL OXYGEN DEMAND
ORGANIC WASTEWATER (OWW)

Sample Date: 3·28·96 Incubator: 20.0 C Analyst: DM

Date/Time In: 3·28·96 / 1340 Date/Time Out: 4.2.96 / 1507

| SAMPLE | BOTTLE # | VOL, ml | DOI, mg/L | DOF mg/L | BOD, mg/L |
|---|---|---|---|---|---|
| OWW | 21 | 8 | 8.96 | | |
| /N | | 8 | | 6.38 | 96.75 |
| OWW | 37 | 5 | 8.89 | | |
| /N | | 5 | | 7.48 | 84.6 |
| OWW | 58 | 3 | 8.92 | | |
| /N | | 3 | | 7.95 ~~7.65~~ | 97 |
| | | | | | |
| N | | | | | |
| | | | | | |
| N | | | | | |

Average OWW BOD, mg/L: 92.78

COMMENTS: OWW 24hr Composite sample split w/ the city of Portland

CALCULATION: BOD, mg/L = $\frac{(\text{DOI, mg/L} - \text{DOF, mg/L}) \times 300}{\text{Volume of Sample, ml}}$

NOTES: 1. A check mark in front of the N = Nutrient Pillow added.
2. Sample Temperature; _____ C

TJR 13 Jun 91
TJR 17 Mar 92 Revised

SCOEPA00035800

BENCHSHEET

BIOCHEMICAL OXYGEN DEMAND
BLANK / QUALITY CONTROL

Date: 3-28-96 Incubator: 20.0 C Analyst: DM

Date/Time In: 3-28-96 / 1340 Date/Time Out: 4-2-96 / 1507

| SAMPLE | BOTTLE # | VOL, ml | DOI, mg/L | DOF mg/L | BOD, mg/L |
|---|---|---|---|---|---|
| Blank | 14 | N/A | 8.85 | | |
| ✓N | | N/A | | 8.74 | 0.11 |

Notes: 1. The Blank (dilution H2O) should have a DO Depletion (DOI, mg/L - DOF, mg/L) < 0.2 mg/L. Reference Standard Methods, 17th Edition, Section 5210 B, para. 4b.

| | | | | | |
|---|---|---|---|---|---|
| QC | 17 | 3 | ~~8.92~~ 8.99 | | |
| ✓N | | 3 | | 4.28 | 220 |

Notes: 1. QC Glucose/Glutamic Acid: Hach, 300mg/L, Lot N6068 (Must divide number by 2 since Standard Methods QC is based on 150mg/L standard.)
2. QC BOD should be 198 mg/L +/- 30 mg/L. (Reference Standard Methods, 18th Edition, 1992, Section 5210, Paragraph 6.
3. Seed the QC bottles with 1 ml of OWW: (Y)
4. QC BOD = ((DOI - DOF) - (Ave DOI's - DOF's)(Seed Vol / Ave Vol)) (100) / 2
= ((8.99 - 4.28) - (____)(____/____))(100)
= 440 / 2
= 220
0.31
5. Method Used:
a. Sodium Thiosulfate (Na2S2O3):
Ricca Other ____
Lot Number: ____
Date Opened: ____
(b) DO Probe:
Barometric Pressure:
Inch X 25.4 = mm
In: 30.01 762
Out: 30.10 765

Comments: ____

TJR 13 Nov 91
TJR 26 Jul 94 Revised

SCOEPA00035801

McCUE

P 699 796 953

**Certified Mail Receipt**
No Insurance Coverage Provided
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UNITED STATES POSTAL SERVICE

| | |
|---|---|
| Sent to MR STEVE ANDERSON<br>CITY PORTLAND - BUR. ENV. SERV | |
| Street & No.<br>1211 S.W. 5th AVE - STE 800 | |
| P.O., State & ZIP Code<br>~~SAN~~ PORTLAND OR 97204 | |
| Postage | $ 55 |
| Certified Fee | 1.10 |
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| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Address of Delivery | |
| TOTAL Postage & Fees | $2.75 |
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USPS

PS Form **3800**, June 1990

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
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- Print your name and address on the reverse of this form so that we can return this card to you.
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- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
MR STEVE ANDERSON
CITY OF PORTLAND
BUR. ENV, SERV.
1211 S.W. 5th. AVE-STE. 800
PORTLAND, OR. 97204

4a. Article Number
P699. 796. 953

4b. Service Type
- ☐ Registered
- ☒ Certified
- ☐ Express Mail
- ☐ Insured
- ☐ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery
15 MAR 1996

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811,** December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

SCOEPA00035803

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

TOM McCUE

SCOEPA00035804

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

March 14, 1996

ER011-96.TM

Mr. Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 SW Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Anderson:

Enclosed is the February Industrial Discharge Report for Wacker Siltronic Corporation Municipal; Discharge Permit 469-01.

If you have any questions, please contact Tom McCue at 241-7532.

Sincerely,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

cc: Tom Rothschild



SCOEPA00035805

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 March 1996

SAMPLING PERIOD: February 1996

TODAY'S DATE: 12 March 1996

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- x PERIODIC COMPLIANCE
- ☐ SPECIAL COMPLIANCE

(For City Use Only)

| SAMPLE LOCATION> | Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

NO EXCURSIONS

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: _____ Date: _____

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035806

03-0

NC
CI
A

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

* * * * * * *

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 March 1996

SAMPLING PERIOD: February 1996

TODAY'S DATE: 12 March 1996

REPORT TYPE (CHECK ONE): (For C

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * *

| SAMPLE DATE > | 27 Feb 1996 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 28 Feb 96 | DATE OF SAMPLE ANAL. > |
|---|---|---|---|---|---|---|---|---|

DATE

TO:

ATTN

FROM

DESC

JOB

P.O.

PROJ

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMM |
|---|---|---|---|---|---|---|
| Arsenic | 710 | 0.002 | 0.3 | --- | NO | DATE: |
| Cadmium | 736 | 0.005 | 0.7 | --- | NO | DATE: |
| Chromium | 748 | 0.005 | 3.8 | --- | NO | DATE: |
| Copper | 752 | 0.023 | 2.3 | --- | NO | DATE: |
| Lead | 811 | 0.002 | 0.7 | --- | NO | DATE: |
| Mercury | 813 | 0.004 | 0.014 | --- | NO | DATE: |
| Nickel | 824 | 0.015 | 3.0 | --- | NO | DATE: |
| Zinc | 874 | 0.026 | 4.0 | --- | NO | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | (SPLIT SAMPLE WITH CITY OF PORTLAND) | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my directio in accordance with a system designed to ensure that qualified personnel properly gather and evaluate t submitted. Based on my inquiry of the person or persons who manage the system, or those persons dire for gathering the information, the information submitted is, to the best of my knowledge and belief, and complete. I am aware that there are significant penalties for submitting false information, incl possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:

Signature: _____ Date: _____

form 13-1A.fil
rev. 6/24/94

SCOEPA00035807

Total Metals per EPA 200 series
Results In mg/L (ppm)

Client: Wacker Siltronic Corporation
Project: OWW
Received: 02/28/1996

NCA Number: P602327
Matrix: water

| Sample Name | Analyte | Result | MRL | Prep Date | Analy Date |
|---|---|---|---|---|---|
| 96.10 | Arsenic | ND | 0.0020 | 02/29 | 03/05 |
| | Cadmium | ND | 0.0050 | | |
| | Chromium | ND | 0.0050 | | |
| | Copper | 0.023 | 0.0050 | | |
| | Lead | ND | 0.0020 | | |
| | Mercury | ND | 0.0040 | | |
| | Nickel | ND | 0.015 | | |
| | Zinc | 0.026 | 0.010 | | |
| Method Blank | Arsenic | ND | 0.0020 | | |
| | Cadmium | ND | 0.0050 | | |
| | Chromium | ND | 0.0050 | | |
| | Copper | ND | 0.0050 | | |
| | Lead | ND | 0.0020 | | |
| | Mercury | ND | 0.0040 | | |
| | Nickel | ND | 0.015 | | |
| | Zinc | ND | 0.010 | | |

Each Composite sent with City

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report

** 400-1

SCOEPA00035808

McCue

P 699 796 904

**Certified Mail Receipt**
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

| | |
|---|---|
| Sent to STEVE ANDERSON CITY PORTLAND BUREAU ENVIR. SERV. | |
| Street & No. 1211 S.W. 5th. AVE-SUITE 800 | |
| P.O., State & ZIP Code PORTLAND, OR 97204 | |
| Postage | $ .32 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, & Address of Delivery | |
| TOTAL Postage & Fees | $ 252 |
| Postmark or Date | |

PS Form 3800, June 1990

PORTLAND, OR 97204 FEB 14 1996 USPS

SCOEPA00035809

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
STEVE ANDERSON
CITY OF PORTLAND
BUR. ENVIR. SERV.
1211 S.W. 5th AVE SUITE 800
PORTLAND, OR. 97204-3713

4a. Article Number
P699-796-904

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
15 FEB 1996

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811,** December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

Wacker Siltronic
P.O. Box 83180
Portland, Or. 97283

Tom McCue

February 14, 1996 ER04:TM

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Anderson

Enclosed is the January Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild

WACKER



SCOEPA00035812

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

**REPORT DUE DATE:** 15 February 1996

SAMPLING PERIOD: January 1996

TODAY'S DATE: 7 February 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

| SAMPLE LOCATION> | Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | NO | EXCURS:IONS | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:
Signature: Thomas C. McClure Date: 2/14/96

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

January 12, 1996

ER01-96.TM

Mr. Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 SW Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Anderson:

Enclosed is the December Industrial Discharge Report for Wacker Siltronic Corporation Municipal; Discharge Permit 469-01.

If you have any questions, please contact Tom McCue at 241-7532.

Sincerely,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

cc: Tom Rothschild



SCOEPA00035814

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also w[illegible]o receive the followir[illegible]vices (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

STEVE ANDERSON
IND. WASTE MANAGEMENT
BES
1211 SW 5TH AVE
PORTLAND, OR 97204-3713

4a. Article Number
Z 158 727 914

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery 7 JAN 1998

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811,** December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service.

UNITED STATES F AL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

TOM McCUE
WACKER SILTRONIC CORP.
P.O. BOX 83180
PORTLAND, OR 97283-0180

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

**INDUSTRY NAME:** Wacker Siltronic Corporation
**PERMIT NUMBER:** 469-001
**REPORT DUE DATE:** 15 January 1996
**SAMPLING PERIOD:** December 1995
**TODAY'S DATE:** 9 January 1996

**REPORT TYPE (CHECK ONE):**
☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

(For City Use Only)

| SAMPLE LOCATION> | OWW Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No Excursions: | | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
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| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Thomas G McCann Date: Jan 12, 1996

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a <u>total</u> duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035817

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

* * * * * * * * * * * * * * * * * *
(For City Use Only)

I1 TRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 January 1996

SAMPLING PERIOD: December 1995

TODAY'S DATE: 9 January 1996

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | 6 Dec. 1995 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 6 Dec 1995 | DATE OF SAMPLE ANAL. > | 19 Dec. 1995 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | < 0.002 | 0.3 | - | no | DATE: 6 Dec. 95 |
| Cadmium | 736 | < 0.005 | 0.7 | - | no | DATE: " |
| Chromium | 748 | 0.0055 | 3.8 | - | no | DATE: " |
| Copper | 752 | 0.018 | 2.3 | - | no | DATE: " |
| Lead | 811 | 0.0046 | 0.7 | - | no | DATE: " |
| Mercury | 813 | < 0.0002 | 0.014 | - | no | DATE: " |
| Nickel | 824 | 0.015 | 3.0 | - | no | DATE: " |
| Zinc | 874 | 0.031 | 4.0 | - | no | DATE: " |
| | | | | | | DATE: |
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| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Si cure: Thomas C M'Cue  Date: JAN 12, 1996

form 13-1A.fil
rev. 6/24/94

LOG SHEET

SAMPLES SENT TO OUTSIDE LABORATORY

1. Facilities Operations # (Year - #): 95-62

2. Date/Time of Sample: 6 Dec 1995 /

3. Name of Sampler: Dave Mullen / T.J. Rothschild

4. Sample Description: OWW 24-hour composite

5. Sent To: ✓ North Creek Analytical
(formerly Pacific Environmental Laboratory, Inc.)
9405 SW Nimbus Avenue
Beaverton, Oregon 97005
643-9200

___ Wacker's Analytical Laboratory

___ Columbia Analytical Services, Incorporated
1152 3rd Avenue
Longview, Washington 98632
(206) 577-7222

6. Analyses Required: As, Cd, Cr (Total), Cu, Pb, Hg, Zn, Ni

7. Chain of Custody Submitted: (Yes) No

8. Purchase Order Number: 46995

9. Cost (or estimate): 151.00

10. Results Received On: [illegible] Final on 29 Dec 95

11. Additional Notes:

TJR 15 Nov 91
TJR 1 Jul 94 Revised

SCOEPA00035819

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX -9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

**Work Order #:**

CLIENT: Wacker Siltronic Corporation
ADDRESS: 7200 N.W. Front Avenue
Portland, Oregon 97
PHONE: 243-2020 FAX: 241-7599
PROJECT NAME: —
PROJECT NUMBER: 95-62
SAMPLED BY: Thomas J. Bathschild

REPORT TO: Wacker Siltronic Corporation
ATTENTION: Thomas J. Bathschild
BILLING TO: Wacker Siltronic Corporation
P.O. NUMBER: 46998
NCA QUOTE #: —

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 | X | 3 | 2 | 1
Fuels & Hydrocarbon Analyses: 5 | 3 | 2 | 1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

| NCA SAMPLE NUMBER | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE / TIME | Analysis Request: RCRA Cr (Total) Cu, Pb, Ni, Zn, Ag | EPA 8240 | MATRIX (W, S, O) | # OF CONTAINERS | COMMENTS & PRESERVATIVES USED |
|---|---|---|---|---|---|---|---|
| | 1. 95-62 | 6 Dec 1995 0830 | X | | W | 1 | HNO3, Cool |
| | 2. 95-63 | 6 Dec 95 0830 | | X | W | 2 | Cool, HCl |
| | 3. | | | | | | |
| | 4. | | | | | | |
| | 5. | | | | | | |
| | 6. | | | | | | |
| | 7. | | | | | | |
| | 8. | | | | | | |
| | 9. | | | | | | |
| | 10. | | | | | | |

RELINQUISHED BY: Thomas J Bathschild DATE: 6 Dec 1995
PRINT NAME: FIRM: Wacker Siltronic TIME: 1530

RECEIVED BY: [illegible] DATE: 12/6/95
PRINT NAME: FIRM: NCA TIME: @ 1530

RELINQUISHED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

PAGE OF

COC Rev 7, 8/95

SCOEPA00035820

NORTH CREEK ANALYTICAL

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RECEIVED DEC 2 9 1995

December 20, 1995

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180

Attention: Thomas J. Rothschild

RE: JOB # 95-62
P.O.# 46998
PROJECT -

Enclosed are test results for your samples received in this lab on Dec. 06, 1995. For your reference, these analyses have been assigned our NCA # P512085.

Solid samples are reported on a dry weight basis except for Oregon DEQ Fuels Methods and where otherwise noted.

This report will be accompanied by a separate Quality Control Data Report, unless omitted by client request.

Please call if you have any questions.

Respectfully,

Joy Chang
Project Manager

NORTH CREEK ANALYTICAL

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# Total Metals per EPA 200 series
**Results In mg/L (ppm)**

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P512085
**Matrix:** water
**Sampled:** 12/06/95
**Received:** 12/06/95

| Client ID | Lab ID | Analyte | Result | MRL | Date Prepared | Date Analyzed |
|---|---|---|---|---|---|---|
| 95-62 | P512085-1 | Arsenic | ND | 0.0020 | 12/13/95 | 12/19/95 |
| | | Cadmium | ND | 0.0050 | | |
| | | Chromium | 0.0055 | 0.0050 | | |
| | | Copper | 0.018 | 0.0050 | | |
| | | Lead | 0.0046 | 0.0020 | | |
| | | Mercury | ND | 0.00020 | | |
| | | Nickel | 0.015 | 0.015 | | |
| | | Zinc | 0.031 | 0.010 | | |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035822

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December 20, 1995

Wacker Siltronic Corporation
P.O. Box 83180
Portland, OR 97283-0180

Attention: Thomas J. Rothschild

Re: Quality Control Data
JOB # 95-62
P.O.# 46998
PROJECT -

NCA project number P512085.

Note: Surrogate Recoveries are included in the final report.

## QUALITY CONTROL DEFINITIONS

### METHOD BLANK RESULTS

The method blank is an analyte-free matrix which is carried through the same analytical process as the samples. It is used to document contamination that may result from the analytical process.

### SURROGATE STANDARD

A surrogate standard (i.e., a chemical compound not expected to occur in an environmental sample) is added to each sample, blank, and matrix spike sample just prior to extraction or processing. The recovery of the surrogate standard is used to monitor for unusual matrix effects, gross sample processing errors, etc. Surrogate recovery is evaluated for acceptance by determining whether the measured concentration falls within accepted limits.

NORTH CREEK ANALYTICAL

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Accuracy is measured by percent recovery as in:

$$\% \text{ Recovery} = \frac{\text{(Measured Concentration)}}{\text{(Actual Concentration)}} \times 100$$

Precision is measured using duplicate tests by relative percent difference.

$$\text{RPD} = \frac{\text{(Result of Test 1 - Result of Test 2)}}{\text{(Result of Test 1 + Result of Test 2)/2}} \times 100$$

If you should have any questions concerning this report, please contact me.

Sincerely,

Joy Chang
Project Manager

NORTH CREEK ANALYTICAL

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East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
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## BATCH QUALITY CONTROL RESULTS
### Total Metals per EPA 200 Series

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P512085
**Received:** 12/06/95

**METHOD BLANK**
**Batch # QW95225a**
**Results In mg/L (ppm)**

| Compound | Result | MRL |
|---|---|---|
| Cadmium | ND | 0.0050 |
| Chromium | ND | 0.0050 |
| Copper | ND | 0.0050 |
| Nickel | ND | 0.015 |
| Zinc | ND | 0.010 |
| Date Prepared | 12/13/95 | |
| Date Analyzed | 12/19/95 | |

**DUPLICATE**
**Batch # QW95225a** **Duplicate ID P512028-4f**
**Results In mg/L (ppm)**

| Compound | Sample Conc | Dup Conc | RPD | QC Limit RPD |
|---|---|---|---|---|
| Cadmium (ap) | ND | ND | – | 20 |
| Chromium (ap) | ND | ND | – | 20 |
| Copper | 0.014 | 0.012 | 16 | 20 |
| Nickel (ap) | ND | ND | – | 20 |
| Zinc | 0.033 | 0.040 | 20 | 20 |

(ap) RPD is not reported for sample concentrations less than 5 times the MRL.

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## BATCH QUALITY CONTROL RESULTS
### Total Metals per EPA 200 Series

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P512085
**Received:** 12/06/95

**MATRIX SPIKE**
**Batch # QW95225a**
**Results In mg/L (ppm)**

**Spike ID P512028-4f**

| Compound | Spike Added | Sample Conc | MS Conc | MS % Rec | QC Limit % Rec |
|---|---|---|---|---|---|
| Cadmium | 0.10 | ND | 0.0975 | 98 | 75-125 |
| Chromium | 0.25 | ND | 0.236 | 94 | 75-125 |
| Copper | 0.25 | 0.014 | 0.261 | 99 | 75-125 |
| Nickel | 0.25 | ND | 0.248 | 99 | 75-125 |
| Zinc | 0.25 | 0.033 | 0.285 | 101 | 75-125 |

**LABORATORY CONTROL SAMPLE**
**Batch # QW95225a**
**Results In mg/L (ppm)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Cadmium | 0.10 | 0.105 | 105 | 75-129 |
| Chromium | 0.25 | 0.244 | 98 | 83-112 |
| Copper | 0.25 | 0.247 | 99 | 86-115 |
| Nickel | 0.25 | 0.260 | 104 | 85-118 |
| Zinc | 0.25 | 0.285 | 114 | 85-117 |

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# BATCH QUALITY CONTROL RESULTS
## Total Metals per EPA 200 Series

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P512085
**Received:** 12/06/95

### METHOD BLANK
**Batch # YW95152a**
**Results In mg/L (ppm)**

| Compound | Result | MRL |
|---|---|---|
| Arsenic | ND | 0.0020 |
| Lead | ND | 0.0020 |
| Date Prepared | 12/13/95 | |
| Date Analyzed | 12/15/95 | |

### DUPLICATE
**Batch # YW95152a** **Duplicate ID P512028-4**
**Results In mg/L (ppm)**

| Compound | Sample Conc | Dup Conc | RPD | QC Limit RPD |
|---|---|---|---|---|
| Arsenic (ap) | ND | ND | – | 20 |
| Lead (ap) | ND | ND | – | 20 |

(ap) RPD is not reported for sample concentrations less than 5 times the MRL.

### MATRIX SPIKE
**Batch # YW95152a** **Spike ID P512028-4**
**Results In mg/L (ppm)**

| Compound | Spike Added | Sample Conc | MS Conc | MS % Rec | QC Limit % Rec |
|---|---|---|---|---|---|
| Arsenic | 0.050 | ND | 0.0488 | 98 | 75-125 |
| Lead | 0.050 | ND | 0.0498 | 100 | 75-125 |

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## BATCH QUALITY CONTROL RESULTS
## Total Metals per EPA 200 Series

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P512085
**Received:** 12/06/95

### LABORATORY CONTROL SAMPLE
**Batch # YW95152a**
**Results In mg/L (ppm)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Arsenic | 0.010 | 0.0102 | 102 | 80-109 |
| Lead | 0.010 | 0.0111 | 111 | 81-140 |

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## BATCH QUALITY CONTROL RESULTS
## Total Metals per EPA 200 Series

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P512085
**Received:** 12/06/95

### METHOD BLANK
**Batch # ZW95079a**
**Results In mg/L (ppm)**

| Compound | Result | MRL |
|---|---|---|
| Mercury | ND | 0.00020 |
| Date Prepared | 12/13/95 | |
| Date Analyzed | 12/14/95 | |

### DUPLICATE
**Batch # ZW95079a** **Duplicate ID P512028-4**
**Results In mg/L (ppm)**

| Compound | Sample Conc | Dup Conc | RPD | QC Limit RPD |
|---|---|---|---|---|
| Mercury (ap) | ND | ND | – | 20 |

(ap) RPD is not reported for sample concentrations less than 5 times the MRL.

### MATRIX SPIKE
**Batch # ZW95079a** **Spike ID P512028-4**
**Results In mg/L (ppm)**

| Compound | Spike Added | Sample Conc | MS Conc | MS % Rec | QC Limit % Rec |
|---|---|---|---|---|---|
| Mercury | 0.0050 | ND | 0.0046 | 92 | 75-125 |

NORTH CREEK ANALYTICAL

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9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

## BATCH QUALITY CONTROL RESULTS
## Total Metals per EPA 200 Series

**Client:** Wacker Siltronic Corporation
**Project:**

**NCA Project #:** P512085
**Received:** 12/06/95

### LABORATORY CONTROL SAMPLE
**Batch # ZW95079a**
**Results In mg/L (ppm)**

| Compound | True | Found | % Rec | QC Limit % Rec |
|---|---|---|---|---|
| Mercury | 0.0050 | 0.0045 | 90 | 82-110 |

SCOEPA00035830

RECEIVED DEC 19 1995

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-9509

SER50.TM

December 13, 1995

Mr. Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 SW Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Anderson:

Enclosed is the November Industrial Discharge Report for Wacker Siltronic Corporation Municipal; Discharge Permit 469-01.

If you have any questions, please contact Tom McCue at 241-7532.

Sincerely,

WACKER SILTRONIC CORPORATION

Thomas C. McCue
Environmental Manager

cc: Tom Rothschild



SCOEPA00035831

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

* * * * * * * * * * * * * * * * * * *
(For City Use Only)

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 December 1995

SAMPLING PERIOD: November 1995

TODAY'S DATE: * December 1995

REPORT TYPE (CHECK ONE):
- ☐ BASELINE MONITORING
- x PERIODIC COMPLIANCE
- ☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | OWW Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

NO EXCURSIONS

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
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| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: [signature] Date: 12/13/95

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

* * * * * * * * * * * * * * * * * * *
(For City Use Only)

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 December 1995

SAMPLING PERIOD: November 1995

TODAY'S DATE: 8 December 1995

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | 3 Nov '95 | SAMPLE LOCATION> | CWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 6 Nov '95 | DATE OF SAMPLE ANAL. > | 14 Nov '95 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | 0.002 | 0.3 | | NO | DATE: |
| Cadmium | 736 | 0.005 | 0.7 | | NO | DATE: |
| Chromium | 748 | 0.005 | 3.8 | | NO | DATE: |
| Copper | 752 | 0.035 | 2.3 | | NO | DATE: |
| Lead | 811 | 0.002 | 0.7 | | NO | DATE: |
| Mercury | 813 | 0.0002 | 0.014 | | NO | DATE: |
| Nickel | 824 | 0.0065 | 3.0 | | NO | DATE: |
| Zinc | 874 | 0.03 | 4.0 | | NO | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: [signature] Date: 12/13/95

form 13-1A.fil
rev. 6/24/94

SCOEPA00035833

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

November 8, 1995 SER 047:CB

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Anderson

Enclosed is the October Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01.

If you have any questions, please contact Tom McCue at 241-7532.

Very truly yours,

WACKER SILTRONIC CORPORATION

Murray M. Tilson, P.E.
Director Manufacturing Support

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild



SCOEPA00035834

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Steve Anderson
Industrial ~~Waste~~ Waste Mgmt.
City of Portland
Bureau of Environmental Serv.
1211 S.W. 5th Ave. Suite 800
Portland, Or. 97204-3713

4a. Article Number

Z 777 067 636

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

14 NOV 1995

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*

X

8. Addressee's Address *(Only if requested and fee is paid)*

PS Form **3811**, December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

SCOEPA00035835

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

Diane Owens

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

**INDUSTRY NAME:** Wacker Siltronic Corporation
**PERMIT NUMBER:** 469-001
**REPORT DUE DATE:** 15 November 1995
**SAMPLING PERIOD:** October 1995
**TODAY'S DATE:** 8 November 1995

**REPORT TYPE (CHECK ONE):**
☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

(For City Use Only)

| SAMPLE LOCATION> | OWW Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | No Excursions: | | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORP. BY:
Signature: Thomas C. McCune Date: 11/8/95

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035837

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

October 12, 1995 SER 044:CB

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Anderson

Enclosed is the September Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01.

If you have any questions, please contact Chip Bloomer at 243-2020 ext 7132.

Very truly yours,

WACKER SILTRONIC CORPORATION

Murray M. Tilson, P.E.
Director Manufacturing Support

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild



SCOEPA00035838

Diane Owens

Z 777 067 615

# Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

| | |
|---|---|
| Sent to CITY OF PORTLAND<br>STEVE ANDERSON | |
| Street and No.<br>1211 SW 5TH AVE - SUITE 800 | |
| P.O., State and ZIP Code<br>PORTLAND, OR. 97204 | |
| Postage | $ .55 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, and Addressee's Address | |
| TOTAL Postage & Fees | $2.75 |
| Postmark or Date | OCT 13 1995 |

PS Form 3800, March 1993

POST OFFICE ST JOHNS OR

USPS

SCOEPA00035839

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Steve Anderson
Industrial Waste Mgmt
City of Portland
Bur. of Environmental Serv.
1211 S.W. 5th Ave - Suite 800
Portland, Or. 97204-3713

4a. Article Number

P 699-796-854

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery 15 DEC 95

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*

X

PS Form **3811**, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SCOEPA00035840

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

Diane Owens

SCOEPA00035841

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 October 1995

SAMPLING PERIOD: September 1995

TODAY'S DATE: 12 October 1995

REPORT TYPE (CHECK ONE):
- ☐ BASELINE MONITORING
- x PERIODIC COMPLIANCE
- ☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | OWW Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| NO | EXCURS | IONS : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Thomas C. McClure Date: 10/13/95

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if they claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035842

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

September 11, 1995 SER 042:CB

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Anderson

Enclosed is the August Industrial Discharge Report and split sample analytical data for Wacker Siltronic Corporation Municipal Discharge Permit 469-01.

If you have any questions, please contact Chip Bloomer at 243-2020 ext 7132.

Very truly yours,

WACKER SILTRONIC CORPORATION

Murray M. Tilson, P.E.
Director Manufacturing Support

enclosure:
(1) Industrial Discharge Report
(2) North Creek Analytical Data

cc: Tom Rothschild



SCOEPA00035843

CHIP B.

Z 777 067 595

**Receipt for Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

| | |
|---|---|
| Sent to STEVE ANDERSON - CITY PORTLAND - BUR. ENVIR QUAL | |
| Street and No. 1211 S.W. 5th AVE - SUITE 800 | |
| P.O. State and ZIP Code PORTLAND, OR. 97204-3713 | |
| Postage | $ .55 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, and Address of Delivery | |
| TOTAL Postage & Fees | $ 2.75 |
| Postmark or Date | SEP 12 1995 |

PORTLAND, OREGON MAIN POST OFFICE STA

USPS

PS Form **3800**, March 1993

SCOEPA00035844

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

STEVE ANDERSON
INDUSTRIAL WASTE MANAGE.
CITY of PORTLAND
BUREAU OF ENVIRON. SERV.
1211 S.W. 5th - SUITE 800
PORTLAND, OR. 97204

4a. Article Number

Z 777 067 595

4b. Service Type

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

14 SEP 1995

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

Official Business

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300

U.S. MAIL

Print your name, address and ZIP Code here

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

CHIP BLOOMER

SCOEPA00035846

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

| | | | |
|---|---|---|---|
| INDUSTRY NAME: | Wacker Siltronic Corporation | REPORT TYPE (CHECK ONE): | (For City Use Only) |
| PERMIT NUMBER: | 469-001 | ☐ BASELINE MONITORING | |
| REPORT DUE DATE: | 15 September 1995 | x PERIODIC COMPLIANCE | |
| SAMPLING PERIOD: | August 1995 | ☐ SPECIAL COMPLIANCE | |
| TODAY'S DATE: | 8 September 1995 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| SAMPLE LOCATION> | OWW Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| NO | EXCURSIONS | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Wacker Siltronic Corporation by:
Signature: Thomas C. McLain   Date: 9/11/95

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035847

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 September 1995

SAMPLING PERIOD: August 1995

TODAY'S DATE: 8 September 1995

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | August 1995 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 11 Aug 1995 | DATE OF SAMPLE ANAL. > | 24 Aug 1995 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic | 710 | <0.002 | 0.3 | | NO | DATE: |
| Cadmium | 736 | <0.005 | 0.7 | | NO | DATE: |
| Chromium | 748 | 0.007 | 3.8 | | NO | DATE: |
| Copper | 752 | 0.11 | 2.3 | | NO | DATE: |
| Lead | 811 | <0.002 | 0.7 | | NO | DATE: |
| Mercury | 813 | <0.0002 | 0.014 | | NO | DATE: |
| Nickel | 824 | <0.015 | 3.0 | | NO | DATE: |
| Silver | 853 | <0.005 | 0.4 | | NO | DATE: |
| Zinc | 874 | 0.031 | 4.0 | | NO | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | Split sample with City of Portland | | | | DATE: |
| | | on August 10, 1995 | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Wacker Siltronic Corporation by:

Signature: Thomas C. McGee Date: 9/11/95

form 13-1A.fil
rev. 6/24/94

SCOEPA00035848

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland. OR 97283-0180
Phone (503) 243-2020
FAX (503) 241-7598
TDD (503) 241-7519

August 14, 1995 SER 035:CB

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Anderson

Enclosed is the July Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01.

If you have any questions, please contact Chip Bloomer at 243-2020 ext 7132.

Very truly yours,

WACKER SILTRONIC CORPORATION

Thomas C. McCune EHS Mgr

Murray M. Tilson, P.E.
Director Manufacturing Support

enclosure:
(1) Industrial Discharge Report

cc: Tom Rothschild

SCOEPA00035849

Tom McCue

Z 777 067 569

**Receipt for Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

| | |
|---|---|
| Sent to STEVE ANDERSON IND. WASTE MGMT - BUR. ENVIR. SERV | |
| Street and No. 1211 S.W. 5TH. AVE SUITE 800 | |
| P.O., State and ZIP Code PORTLAND, OR. 97204-3713 | |
| Postage | $ .32 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, and Address of Delivery | |
| TOTAL Postage & Fees | $ 2.52 |
| Postmark or Date | AUG 15 1995 |

PS Form **3800**, March 1993

PORTLAND, OR ST JOHNS STA
USPS

SCOEPA00035850

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
STEVE ANDERSON
INDUSTRIAL WASTE MANAGMENT
BUREAU OF ENVIRONMENTAL SERV.
1211 S.W. 5th. AVE., SUITE 800
PORTLAND, OR. 97204-3713

4a. Article Number
Z 777 067 569

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
17 AUG 1995

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

Official Business

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, $300

U.S. MAIL

Print your name, address and ZIP Code here

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

Tom McCue

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

INDUSTRY NAME: Wacker Siltronic Corporation

MIT NUMBER: 469-001

REPORT DUE DATE: August 15, 1995

SAMPLING PERIOD: July 1995

TODAY'S DATE: 11 August 1995

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

(For City Use Only)

| SAMPLE DATE > | | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | | DATE OF SAMPLE ANAL. > | |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Fluoride | 797 | **Attach summary.** | 30.0 | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| SAMPLE DATE > | Continuous | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | __ COMPOSITE XX GRAB | DATE RECEIVED AT LAB > | NA | DATE OF SAMPLE ANAL.> | NA |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organics (No analysis required) | 858 | --- | 1.37 | | | TTO CERTIFICATION (See Statement Below) |
| pH | 843 | Within Limits | 5.5-11.5 | | NO | Attach Form 13-1C |
| | | | | | | |
| | | | | | | |
| | | | | | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

"Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation (or pretreatment standard) for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no discharge of toxic organics into the wastewaters in excess of the TTO limit has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting (or control) authority."

WAFER SILTRONIC CORPORATION BY:

Signature: [signature] Date: 8/14/95

form 13-1A.fil
rev. 6/24/94

SCOEPA00035853

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation
PERMIT NUMBER: 469-001
REPORT DUE DATE: 15 August 1995
SAMPLING PERIOD: July 1995
TODAY'S DATE: 11 August 1995

REPORT TYPE (CHECK ONE):
- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | OWW Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

NO EXCURSIONS

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

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WACKER SILTRONIC CORPORATION

Signature: ______________________ Date: ______________________

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

**INSTRUCTIONS:** Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

**VIOLATIONS:**
1. pH excursions outside your permit range for a <u>total</u> duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

**CLAIMED NON-VIOLATIONS:**
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

July 14, 1995 SER 030:CB

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1211 S.W. Fifth Avenue, Suite 800
Portland, Oregon 97204-3713

Dear Mr. Anderson

Enclosed is the June Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. As indicated, there is an exceedence for the daily sulfate limit. The exceedence was caused by a deviation from standard operating procedures at the waste water treatment facility. The environmental technician on duty during the time of the deviation has been suspended from work and is being evaluated for dismissal from Wacker employment. All other data is in compliance with permit parameters.

If you have any questions, please contact Chip Bloomer at 243-2020 ext 7132.

Very truly yours,

WACKER SILTRONIC CORPORATION

Murray M. Tilson, P.E.
Director Manufacturing Support

enclosure:
(1) Industrial Discharge Report
(2) Bench Sheet Data
(3) North Creek Analytical Data

cc: Tom Rothschild



SCOEPA00035855

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

1 STRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 July 1995

SAMPLING PERIOD: June 1995

TODAY'S DATE: 13 July 1995

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | | DATE OF SAMPLE ANAL. > | |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Nickel | 824 | 0.015 | --- | --- | NO | DATE: 21 June 1995 |
| Silver | 853 | 0.005 | --- | --- | NO | DATE: 21 June 1995 |
| | | | | | | DATE: |
| | | | | | | DATE: |
| Sulfate | 854 | 506 | 500 | --- | YES | DATE: 27 June 1995 |
| Sulfate | 854 | 221 | 500 | --- | NO | DATE: 28 June 1995 |
| Sulfate | 854 | 2.5 | 500 | --- | NO | DATE: 29 June 1995 |
| Sulfate | 854 | 5.0 | 500 | --- | NO | DATE: 30 June 1995 |
| | | | | | | DATE: |
| | | | | | | DATE: |
| | | | | | | DATE: |
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| | | | | | | DATE: |
| | | | | | | DATE: |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: Chip M

Date: 7/14/95

form 13-1A.fil
rev. 6/24/94

SCOEPA00035856

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

I TRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: July 15, 1995

SAMPLING PERIOD: June 1995

TODAY'S DATE: 13 July 1995

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | June 1995 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 21 June 95 | DATE OF SAMPLE ANAL. > | Approx. 10 Jul '95 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Arsenic (Total) | 710 | 0.002 | 0.3 | | NO | |
| Cadmium (Total) | 736 | 0.005 | 0.7 | | NO | |
| Chromium (Total) | 748 | 0.005 | 3.8 | | NO | |
| Zinc (Total) | 874 | 0.024 | 4.0 | | NO | |
| Fluoride | 797 | Not Required ~~Attach summary.~~ | 30.0 | | --- | |
| Total Suspended Solids | 857 | Not Required ~~Attach summary.~~ | 350.0 | | --- | |
| Copper | 752 | 0.018 | --- | --- | NO | |
| ad | 811 | 0.002 | --- | --- | NO | |
| Mercury | 813 | 0.0036 | --- | --- | NO | |

| SAMPLE DATE > | Contin-uous | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | __ COMPOSITE XX GRAB | DATE RECEIVED AT LAB > | NA | DATE OF SAMPLE ANAL.> | NA |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organics (No analysis required) | 858 | Not Required | 1.37 | | | TTO CERTIFICATION (See Statement Below) |
| pH | 843 | Within Limits | 5.5-11.5 | | | Attach Form 13-1C |
| | | | | | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

"Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation (or pretreatment standard) for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no discharge of toxic organics into the wastewaters in excess of the TTO limit has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting (or control) authority."

W ER SILTRONIC CORP. BY:
Si ature: _____ Date: 7/14/95

form 13-1A.fil
rev. 6/24/94

SCOEPA00035857

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

* * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * *

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 July 1995

SAMPLING PERIOD: June 1995

TODAY'S DATE: 13 July 1995

REPORT TYPE (CHECK ONE):
- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ SPECIAL COMPLIANCE

| SAMPLE LOCATION> | OWW Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | NO EXCURSIONS | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: [signature] Date: 7/14/95

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035858

Wacker Siltronic Corporation

WACKER

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

June 13th, 1995 SER27:SA

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1120 S.W. Fifth Avenue, Room 400
Portland, Oregon 97204-1972

Dear Mr. Anderson

Enclosed is additional data for the May Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. As indicated, all data is in compliance with permit parameters.

If you have any questions, please contact Chip Bloomer at 243-2020 ext 7132.

Very truly yours,

WACKER SILTRONIC CORPORATION

Murray M. Tilson, P.E.
Director of Manufacturing Support

enclosure:
(1) Benchsheet data

cc: Tom Rothschild



SCOEPA00035859

SANDRA ARCHER

Z 777 067 505

**Receipt for Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

| | |
|---|---|
| Sent to STEVE ANDERSON<br>CITY OF PORT - BUR ENV. SERV | |
| Street and No.<br>1120 S.W. 5th. AVE - Rm 400 | |
| P.O., State and ZIP Code<br>PORTLAND, OR. | |
| Postage | $1.01 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, and Addressee's Address | |
| TOTAL Postage & Fees | $3.21 |
| Postmark or Date | JUN 14 1995 |

PORTLAND OR SAINT JOHNS STA

USPS

PS Form **3800**, March 1993

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
STEVE ANDERSON, IND. WASTE
CITY OF PORTLAND, BUR. ENV. SERV.
1120 S.W. 5th. AVE - Rm 400
PORTLAND, OR 97204-1972

4a. Article Number
Z 777 067 505

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
15 JUN 1995

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)
Colleen E. Moody

PS Form 3811, December 1991 ☆U.S. GPO:1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

SCOEPA00035861

UNITED STATES POSTAL SERVICE

Official Business

PORTLAND OR 972 5
PM
16 JUN
1995

ALWAYS USE ZIP
PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300

U.S. MAIL

Print your name, address and ZIP Code here

• WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

Attn Sandra Archer

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

JSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: June 15, 1995

SAMPLING PERIOD: May 1995

TODAY'S DATE: June 8, 1995

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | May 1995 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 16 May 95 | DATE OF SAMPLE ANAL. > | 16-17 May 1995 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Fluoride | 797 | 4.1 Attach summary. | 30.0 | | NA | Split with |
| Total Suspended Solids | 857 | 556 | --- | --- | NA | City of Portland 16 May 95 |
| Total Toxic Organics | 858 | < 0.05 | --- | --- | NA | |
| Sulfate | 854 | 950 | --- | 500 | | |
| Arsenic | 710 | < 0.002 | 0.3 | --- | NO | |
| Cadmium | 736 | < 0.0001 | 0.7 | --- | NO | |
| Chromium | 748 | 0.02 | 3.8 | --- | NO | |

CONTINUED ON NEXT PAGE

| SAMPLE DATE > | Continuous | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | __ COMPOSITE XX GRAB | DATE RECEIVED AT LAB > | NA | DATE OF SAMPLE ANAL.> | NA |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organics (No analysis required) | 858 | | 1.37 | | | TTO CERTIFICATION (See Statement Below) |
| pH | 843 | Within Limits | 5.5-11.5 | | NO | Attach Form 13-1C |
| | | | | | | |
| | | | | | | |
| | | | | | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

"Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation (or pretreatment standard) for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no discharge of toxic organics into the wastewaters in excess of the TTO limit has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting (or control) authority."

WACKER SILTRONIC CORPORATION BY:

Signature: _____ Date: 6/12/95

form 13-1A.fil
rev. 6/24/94

SCOEPA00035863

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

* * * * * * * * * * * * * * * * * *
(For City Use Only)

JSTRY NAME: Wacker Siltronic Corporation
PERMIT NUMBER: 469-001
REPORT DUE DATE: 15 June 1995
SAMPLING PERIOD: May 1995
TODAY'S DATE: June 8, 1995

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
X PERIODIC COMPLIANCE
☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | 16 May 1995 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 16 May 1995 | DATE OF SAMPLE ANAL. > | 16-17 May 1995 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Copper | 752 | 0.02 | 2.3 | --- | NO | DATE: City of |
| Lead | 811 | 0.006 | 0.7 | --- | NO | DATE: Portland |
| Mercury | 813 | 0.006 | --- | --- | NA | DATE: split |
| Nickel | 824 | 0.016 | 3.0 | --- | NO | DATE: 16, May 1995 |
| Silver | 853 | < 0.005 | 0.4 | --- | NO | DATE: |
| Zinc | 874 | 0.07 | 4.0 | --- | NO | DATE: |
| | | | | | | DATE: |
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WACKER SILTRONIC CORPORATION BY:

Signature: _____ Date: 6/12/95

form 13-1A.fil
rev. 6/24/94

SCOEPA00035864

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

* * * * * * * * * * * * * * * * * *
(For City Use Only)

**INDUSTRY NAME:** Wacker Siltronic Corporation
**PERMIT NUMBER:** 469-001
**REPORT DUE DATE:** 15 June 1995
**SAMPLING PERIOD:** May 1995
**TODAY'S DATE:** 8 June 1995

**REPORT TYPE (CHECK ONE):**
- ☐ BASELINE MONITORING
- x PERIODIC COMPLIANCE
- ☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | OWW Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

NO EXCURSIONS

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: _____ Date: 6/12/95

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

**INSTRUCTIONS:** Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

**VIOLATIONS:**
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

**CLAIMED NON-VIOLATIONS:**
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035865

BENCHSHEET

TOTAL SUSPENDED SOLIDS (TSS)

Sample Date: ~~17~~ 16 May 95 Oven Temp: 101 C Analyst: SJR

Date In: 17 May 95 Time In/Out: 1104 / ~~1430~~ 1421

| Sample | Vol, ml | Gross Wt, g | Tare Wt, g | TSS, mg/L |
|---|---|---|---|---|
| 1. Blank | NA | | | |
| 2. CE | 200 | | | |
| 3. CE | 200 | | | |
| | | | Average CE TSS | |
| 4. OWW (1) | 50 | 0.1169 | 0.0890 | 558 |
| 5. OWW | 50 | 0.1133 | 0.0856 | 554 |
| | | | Average OWW TSS | 556 |
| 6. | | | | |
| 7. | | | | |
| | | | Average TSS | |
| 8. | | | | |
| 9. | | | | |
| | | | Average TSS | |

Notes: (1) OWW split with City of Portland

Calculation: TSS, mg/L = $\frac{\text{(Gross Wt, mg - Tare Wt, mg) X 1000}}{\text{Volume of Sample, ml}}$

Reference: Standard Methods for the Examination of Water and Wastewater, 1992, 18th Edition. Section 2540 D,

Mar 87
May 94 Revised

OWW TSS
16 May 95
SJR

116.9 ÷
89. -
27.9 *
27.9 x
1,000. ÷
50. =
558. *
558. +M
113.3 +
85.6 -
27.7 *
27.7 x
1,000. ÷
50. =
554. *
554. +M
1,112. ◊M
1,112. ÷
2. =
556. *

NORTH CREEK ANALYTICAL
(Formerly Pacific Environmental Laboratory, Inc.)
9405 S.W. Nimbus Ave. • Beaverton, OR 97005 • (503) 643-9200 • FAX # (503) 644-2202

TJR

# FAX TRANSMITTAL

DATE: 6/7/95

TO: Wacker Siltronic

ATTN: Thomas Rotnochill

FROM: Cindy Hetrick

*We are sending* 3 *pages, including this cover sheet.*

DESCRIPTION metals results

*If you experience any problems with this transmission, please call us!*

SCOEPA00035867

NORTH CREEK ANALYTICAL

19939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 48 32
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

CLIENT: Wacker Siltronic Corporation
ADDRESS: 7200 N.W. Front Avenue, Portland, Oregon 97210
PHONE: 243-2620 FAX: 241-7599

REPORT TO: Thomas J. Rothschild
BILLING TO: Wacker Siltronic
P.O. NUMBER: 46998
NCA QUOTE #:

PROJECT NAME: CWK grab
PROJECT NUMBER: 95-31
SAMPLED BY: Thomas J. Rothschild

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: [X] 10 [5] [3] [2] [1]
(Please Select One)
Fuels & Hydrocarbon Analyses: [5] [3] [2] [1]
* Turnaround Requests less than standard will incur Rush Charges.
FAX RESULTS BY :

| SAMPLE IDENTIFICATION: (NUMBER OR DESCRIPTION) | SAMPLING DATE / TIME | MATRIX (W,S,O) | # OF CONT. | Analysis Request: EPA 8240 | COMMENTS & PRESERVATIVES USED | NCA SAMPLE NUMBER |
|---|---|---|---|---|---|---|
| 1. 95-31 | 15 May 95 1445 | W | 2 | X | HCl, Cool | P505204 |
| 2. 95-32 | 16 May 95 1435 | W | 1 | X | | |
| 3. 95-33 | 16 May 95 1445 | W | 1 | X | | |
| 4. | | | | | | |
| 5. | | | | | | |
| 6. | | | | | | |
| 7. | | | | | | |
| 8. | | | | | | |
| 9. | | | | | | |
| 10. | | | | | | |

RELINQUISHED BY: Thomas J. Rothschild DATE: 16 May 95
PRINT NAME: Thomas J. Rothschild FIRM: Wacker TIME: 1445
RECEIVED BY: Dianne Mullan DATE: 5-16-95
PRINT NAME: Dianne E Mullan FIRM: Wacker Siltronic TIME: 1445

RELINQUISHED BY: Dianne Mullan DATE: 5-16-95
PRINT NAME: Dianne Mullan FIRM: WACKER Siltronic TIME: 1515
RECEIVED BY: Sara McClung DATE: 5/16/95
PRINT NAME: Sara McClung FIRM: NCA TIME: 1515

ADDITIONAL REMARKS:

PAGE OF

COC Rev 6, 10/94

FROM: NORTH CREEK ANALYTICAL TO: 503 241 7599 1995-05-17 04:14PM #732 P.02/03

SCOEPA00035868

Total Metals per EPA 200 series
Results In mg/L (ppm)

Client: Wacker Siltronic Corporation
Project: OWW GRAB
Received: 05/16/1995

NCA Number: P505204
Matrix: water

| Sample Name | Analyte | Result | MRL | Prep Date | Analy Date |
|---|---|---|---|---|---|
| 95-32 | Arsenic | ND | 0.0020 | 05/17 | 05/30 |
| | Cadmium | ND | 0.00013 | | |
| | Chromium | 0.021 | 0.0050 | | |
| | Copper | 0.024 | 0.0050 | | |
| | Lead | 0.0061 | 0.0020 | | |
| | Mercury | 0.0054 | 0.00020 | | |
| | Nickel | 0.016 | 0.015 | | |
| | Silver | ND | 0.0050 | | |
| | Zinc | 0.068 | 0.010 | | |
| Method Blank | Arsenic | ND | 0.0020 | | |
| | Cadmium | ND | 0.00013 | | |
| | Chromium | ND | 0.0050 | | |
| | Copper | ND | 0.0050 | | |
| | Lead | ND | 0.0020 | | |
| | Mercury | ND | 0.00020 | | |
| | Nickel | ND | 0.015 | | |
| | Silver | ND | 0.0050 | | |
| | Zinc | ND | 0.010 | | |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report.

** 400-1

SCOEPA00035869

NORTH CREEK ANALYTICAL
(Formerly Pacific Environmental Laboratory, Inc.)
9405 S.W. Nimbus Ave. • Beaverton, OR 97005 • (503) 643-9200 • FAX # (503) 644-2202

31 May/95 JJR

# FAX TRANSMITTAL

DATE: 5/30/95

TO: Wacker Siltronic

ATTN: Thomas Rothschild

FROM: Cindy Hetrick

*We are sending* 7 *pages, including this cover sheet.*

DESCRIPTION metals results to follow later

*If you experience any problems with this transmission, please call us!*

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 481-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

# CHAIN OF CUSTODY REPORT

CLIENT: Wacker Siltronic Corporation
ADDRESS: 7200 N.W. Front Avenue, Portland, Oregon 97210
PHONE: 243-2020 FAX: 241-7599
PROJECT NAME: CWW grab
PROJECT NUMBER: 95-31
SAMPLED BY: Thomas J. Rothschild

REPORT TO: Thomas J. Rothschild
BILLING TO: Wacker Siltronic
P.O. NUMBER: 46998
NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: [X] 10 [ ] 5 [ ] 3 [ ] 2 [ ] 1
(Please Select One)
Fuels & Hydrocarbon Analyses: [ ] 5 [ ] 3 [ ] 2 [ ] 1
* Turnaround Requests less than standard will incur Rush Charges.
FAX RESULTS BY:

| SAMPLE IDENTIFICATION: (NUMBER OR DESCRIPTION) | SAMPLING DATE / TIME | MATRIX (W,S,O) | # OF CONT. | Analysis Request: EPA 8240 | COMMENTS & PRESERVATIVES USED | NCA SAMPLE NUMBER |
|---|---|---|---|---|---|---|
| 1. 95-31 | 15 May 95 1445 | W | 2 | X | HCl, Cool | P505204 |
| 2. 95-32 | 16 May 95 1415 | W | 1 | X | | |
| 3. 95-33 | 16 May 95 1425 | W | 1 | X | | |
| 4. | | | | | | |
| 5. | | | | | | |
| 6. | | | | | | |
| 7. | | | | | | |
| 8. | | | | | | |
| 9. | | | | | | |
| 10. | | | | | | |

RELINQUISHED BY: Thomas J. Rothschild DATE: 16 May 95
PRINT NAME: Thomas J. Rothschild FIRM: Wacker TIME: 1445
RECEIVED BY: Dianne Mullan DATE: 5-16-95
PRINT NAME: Dianne E Mullan FIRM: Wacker Siltronic TIME: 1445

RELINQUISHED BY: Dianne Mullan DATE: 5-16-95
PRINT NAME: Dianne Mullan FIRM: WACKER SILTRONIC TIME: 1515
RECEIVED BY: Sara McClung DATE: 5/16/95
PRINT NAME: Sara McClung FIRM: NCA TIME: 1515

ADDITIONAL REMARKS:

PAGE OF

COC Rev 6, 10/94

FROM :NORTH CREEK ANALYTICAL TO : 503 241 7599 1995,05-30 01:58PM #520 P.02

SCOEPA00035871

Volatile Organic Compounds per EPA 8240
Results In ug/L (ppb)

Client: Wacker Siltronic Corporation
Project: OWW GRAB
Received: 05/16/1995

NCA Number: P505204
Matrix: water

| Sample Name | Analyte | Result | MRL |
|---|---|---|---|
| 95-31 | Acetone | 1600 | 130 |
| | Acrolein | ND | 1000 |
| | Acrylonitrile | ND | 50 |
| | Benzene | ND | 10 |
| | Bromodichloromethane | ND | 10 |
| | Bromoform | ND | 10 |
| | Bromomethane | ND | 50 |
| | 2-Butanone | ND | 130 |
| | Carbon Disulfide | ND | 10 |
| | Carbon Tetrachloride | ND | 10 |
| | Chlorobenzene | ND | 10 |
| | Chloroethane | ND | 50 |
| | Chloroform | ND | 10 |
| | Chloromethane | ND | 50 |
| | Dibromochloromethane | ND | 10 |
| | Dibromomethane | ND | 10 |
| | 1,4-Dichloro-2-butene | ND | 50 |
| | 1,2-Dichlorobenzene | ND | 10 |
| | 1,3-Dichlorobenzene | ND | 10 |
| | 1,4-Dichlorobenzene | ND | 10 |
| | Dichlorodifluoromethane | ND | 25 |
| | 1,1-Dichloroethane | ND | 10 |
| | 1,2-Dichloroethane | ND | 10 |
| | 1,1-Dichloroethene | ND | 10 |
| | cis-1,2-Dichloroethene | ND | 10 |
| | trans1,2Dichloroethene | ND | 10 |
| | 1,2-Dichloropropane | ND | 10 |
| | cis-1,3-Dichloropropene | ND | 10 |
| | trans1,3Dichloropropene | ND | 10 |
| | Ethyl Methacrylate | ND | 10 |
| | Ethylbenzene | ND | 10 |
| | 2-Hexanone | ND | 25 |
| | Iodomethane | ND | 10 |
| | 4-Methyl-2-pentanone | ND | 25 |
| | Methylene Chloride | ND | 25 |
| | Styrene | ND | 10 |
| | 1,1,2,2-Tetrachloroethane | ND | 10 |
| | Tetrachloroethene | ND | 10 |
| | Toluene | ND | 10 |
| | 1,1,1-Trichloroethane | ND | 10 |
| | 1,1,2-Trichloroethane | ND | 10 |
| | Trichloroethene | ND | 10 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035872

Volatile Organic Compounds per EPA 8240
Results In ug/L (ppb)

Client: Wacker Siltronic Corporation
Project: OWW GRAB
Received: 05/16/1995

NCA Number: P505204
Matrix: water

| Sample Name | Analyte | Result | MRL |
|---|---|---|---|
| 95-31 (continued) | Trichlorofluoromethane | ND | 10 |
| | 1,2,3-Trichloropropane | ND | 10 |
| | Vinyl Acetate | ND | 25 |
| | Vinyl Chloride | ND | 25 |
| | Xylenes (total) | ND | 10 |
| | Date Prepped | 05/17/95 | |
| | Date Analyzed | 05/17/95 | |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report

** 711-2

SCOEPA00035873

Volatile Organic Compounds per EPA 8240
Results In ug/L (ppb)

Client: Wacker Siltronic Corporation
Project: OWW GRAB
Received: 05/16/1995

NCA Number: P505204
Matrix: water

| Sample Name | Analyte | Result | MRL |
|---|---|---|---|
| Method Blank | Acetone | ND | 25 |
| | Acrolein | ND | 200 |
| | Acrylonitrile | ND | 10 |
| | Benzene | ND | 2.0 |
| | Bromodichloromethane | ND | 2.0 |
| | Bromoform | ND | 2.0 |
| | Bromomethane | ND | 10 |
| | 2-Butanone | ND | 25 |
| | Carbon Disulfide | ND | 2.0 |
| | Carbon Tetrachloride | ND | 2.0 |
| | Chlorobenzene | ND | 2.0 |
| | Chloroethane | ND | 10 |
| | Chloroform | ND | 2.0 |
| | Chloromethane | ND | 10 |
| | Dibromochloromethane | ND | 2.0 |
| | Dibromomethane | ND | 2.0 |
| | 1,4-Dichloro-2-butene | ND | 10 |
| | 1,2-Dichlorobenzene | ND | 2.0 |
| | 1,3-Dichlorobenzene | ND | 2.0 |
| | 1,4-Dichlorobenzene | ND | 2.0 |
| | Dichlorodifluoromethane | ND | 5.0 |
| | 1,1-Dichloroethane | ND | 2.0 |
| | 1,2-Dichloroethane | ND | 2.0 |
| | 1,1-Dichloroethene | ND | 2.0 |
| | cis-1,2-Dichloroethene | ND | 2.0 |
| | trans1,2Dichloroethene | ND | 2.0 |
| | 1,2-Dichloropropane | ND | 2.0 |
| | cis-1,3-Dichloropropene | ND | 2.0 |
| | trans1,3Dichloropropene | ND | 2.0 |
| | Ethyl Methacrylate | ND | 2.0 |
| | Ethylbenzene | ND | 2.0 |
| | 2-Hexanone | ND | 5.0 |
| | Iodomethane | ND | 2.0 |
| | 4-Methyl-2-pentanone | ND | 5.0 |
| | Methylene Chloride | ND | 5.0 |
| | Styrene | ND | 2.0 |
| | 1,1,2,2-Tetrachloroethane | ND | 2.0 |
| | Tetrachloroethene | ND | 2.0 |
| | Toluene | ND | 2.0 |
| | 1,1,1-Trichloroethane | ND | 2.0 |
| | 1,1,2-Trichloroethane | ND | 2.0 |
| | Trichloroethene | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035874

Volatile Organic Compounds per EPA 8240
Results In ug/L (ppb)

Client: Wacker Siltronic Corporation
Project: OWW GRAB
Received: 05/16/1995

NCA Number: P505204
Matrix: water

| Sample Name | Analyte | Result | MRL |
|---|---|---|---|
| Method Blank (continued) | Trichlorofluoromethane | ND | 2.0 |
| | 1,2,3-Trichloropropane | ND | 2.0 |
| | Vinyl Acetate | ND | 5.0 |
| | Vinyl Chloride | ND | 5.0 |
| | Xylenes (total) | ND | 2.0 |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035875

Sulfate per EPA 300.0
Results In mg/L (ppm)

Client: Wacker Siltronic Corporation
Project: OWW GRAB
Received: 05/16/1995

NCA Number: P505204
Matrix: water

| Sample Name | Analyte | Result | MRL | Prep Date | Analy Date |
|---|---|---|---|---|---|
| 95-33 | Sulfate | 950 | 1.0 | 05/26 | 05/26 |
| Method Blank | Sulfate | ND | 1.0 | | |

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report



SCOEPA00035876

BENCHSHEET

TOTAL SUSPENDED SOLIDS (TSS)

Sample Date: 16 May 95 Oven Temp: 101 C Analyst: SJR

Date In: 17 May 95 Time In/Out: 1604 / 1421 1430

| Sample | Vol, ml | Gross Wt, g | Tare Wt, g | TSS, mg/L |
|---|---|---|---|---|
| 1. Blank | NA | | | |
| 2. CE | 200 | | | |
| 3. CE | 200 | | | |
| | | | Average CE TSS | |
| 4. OWW (1) | 50 | 0.1169 | 0.0890 | 558 |
| 5. OWW | 50 | 0.1133 | 0.0856 | 554 |
| | | | Average OWW TSS | 556 |
| 6. | | | | |
| 7. | | | | |
| | | | Average TSS | |
| 8. | | | | |
| 9. | | | | |
| | | | Average TSS | |

Notes: (1) oww split with City of Portland

Calculation: TSS, mg/L = (Gross Wt, mg - Tare Wt, mg) X 1000 / Volume of Sample, ml

Reference: Standard Methods for the Examination of Water and Wastewater, 1992, 18th Edition. Section 2540 D,

Mar 87
May 94 Revised

OWW TSS 16 May 95 SJR

115.9 +
89. -
27.9 *
27.9 x
1,000. ÷
50. =
558. *
558. +M
115.3 +
85.6 -
27.7 *
27.7 x
1,000. ÷
50. =
554. *
554. +M
1,112. ÷
2. =
556. *

SCOEPA00035877

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
FAX (503) 241-7598
TDD (503) 241-7519

May 11, 1995 SER22:SA

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1120 S.W. Fifth Avenue, Room 400
Portland, Oregon 97204-1972

Dear Mr. Anderson

Enclosed is additional data for the April Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. As indicated, all data is in compliance with permit parameters.

If you have any questions, please contact Chip Bloomer at 243-2020 ext 7132.

Very truly yours,

WACKER SILTRONIC CORPORATION

Murray M. Tilson, P.E.
Director of Manufacturing Support

enclosure:
(1) Benchsheet data

cc: Tom Rothschild

Murray Illson

Z 777 067 484

# Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

| | |
|---|---|
| Sent to STEVE ANDERSON<br>CITY PORTLAND-BUR. ENV. SERV. | |
| Street and No.<br>1120 S.W. 5th. - Rm 400 | |
| P.O., State and ZIP Code<br>PORTLAND, OR. 97204-1972 | |
| Postage | $ .32 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, and Addressee's Address | |
| TOTAL Postage & Fees | $2.52 |
| Postmark or Date | MAR 12 1995 |

PS Form 3800, March 1993

USPS

SCOEPA00035879

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
STEVE ANDERSON
CITY OF PORTLAND
BUR. ENVIRON. SERV.
1120 S.W. 5th. AVE-Rm 400
PORTLAND, OR. 97204-1972

4a. Article Number
Z 777-067-484

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
MAY 15 [illegible]

5. Signature (Addressee)

6. Signature (Agent) [signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

SCOEPA00035880

UNITED STATES POSTAL SERVICE

Official Business

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, $300

U.S. MAIL

Print your name, address and ZIP Code here

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

Atta - Murray Tilson

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

* * * * * * * * * * * * * * * * * *
(For City Use Only)

INDUSTRY NAME: Wacker Siltronic Corporation
PERMIT NUMBER: 469-001
REPORT DUE DATE: 15 May 1995
SAMPLING PERIOD: April 1995
TODAY'S DATE: 9 May 1995

REPORT TYPE (CHECK ONE):
☐ BASELINE MONITORING
x PERIODIC COMPLIANCE
☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | OWW Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

No Excursions **pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:
Signature: _____ Date: 5/11/95

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035882

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

* * * * * * * * * * * * * * * * * *
(For City Use Only)

DUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: May 15, 1995

SAMPLING PERIOD: April 1995

TODAY'S DATE: 9 May 95

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | April 1995 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | NA | DATE OF SAMPLE ANAL. > | NA |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Fluoride | 797 | NA ~~Attach summary.~~ | 30.0 | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| SAMPLE DATE > | Contin-uous | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | __ COMPOSITE XX GRAB | DATE RECEIVED AT LAB > | NA | DATE OF SAMPLE ANAL.> | NA |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organics (No analysis required) | 858 | | 1.37 | | | TTO CERTIFICATION (See Statement Below) |
| pH | 843 | Within Limits | 5.5-11.5 | | NO | Attach Form 13-1C |
| | | | | | | |
| | | | | | | |
| | | | | | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

"Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation (or pretreatment standard) for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no discharge of toxic organics into the wastewaters in excess of the TTO limit has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan s[illegible]cted to the permitting (or control) authority."

WACKER SILTRONIC CORPORATION BY:

Signature: [signature] Date: 5/11/95

form 13-1A.fil
rev. 6/24/94

SCOEPA00035883

April 14, 1995 SER16:SA

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1120 S.W. Fifth Avenue, Room 400
Portland, Oregon 97204-1972

Dear Mr. Anderson

Enclosed is additional data for the March Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. As indicated, all data is in compliance with permit parameters.

If you have any questions, please contact Chip Bloomer at 243-2020 ext 7132.

Very truly yours,

WACKER SILTRONIC CORPORATION

Murray M. Tilson, P.E.
Director of Manufacturing Support

enclosure:
(1) Benchsheet data

cc: Tom Rothschild

Murray Wilson.

Z 777 067 477

**Receipt for Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

| | |
|---|---|
| Sent to STEVE ANDERSON CITY PORTLAND - ENVIRON SERV. | |
| Street and No. 1120 S.W. 5th. AVE - Rm 400 | |
| P.O., State and ZIP Code PORTLAND, OR. 97204-1972 | |
| Postage | $ .32 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, and Addressee's Address | |
| TOTAL Postage & Fees | $2.52 |
| Postmark or Date | APR 18 1995 |

PS Form 3800, March 1993

PORTLAND OR SAINT JOHNS STA
USPS

SCOEPA00035885

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Steve Anderson
Industrial Waste Mgmt.
City of Portland
Bureau of Environmental Serv.
1120 S.W. 5th Ave, Room 400
Portland, Or. 97204-1972

4a. Article Number

Z 777.069-475

4b. Service Type

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Michael Just

PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

SCOEPA00035886

UNITED STATES POSTAL SERVICE

Official Business

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, $300

U.S. MAIL

Print your name, address and ZIP Code here

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

Attn: Murray Nelson

SCOEPA00035887

Total Metals per EPA 200 series
Results In mg/L (ppm)

Client: Wacker Siltronic Corporation
Project:
Received: 03/13/1995

NCA Number: P503157
Matrix: liquid

| Sample Name | Analyte | Result | MRL | Prep Date | Analy Date |
|---|---|---|---|---|---|
| 95-14 | Arsenic | ND | 0.0040 | 03/15 | 03/23 |
| | Cadmium | 0.00025 | 0.00025 | | |
| | Chromium | ND | 0.020 | | |
| | Copper | ND | 0.020 | | |
| | Lead | ND | 0.0040 | | |
| | Mercury | ND | 0.020 | | |
| | Nickel | ND | 0.050 | | |
| | Zinc | ND | 0.050 | | |
| Method Blank | Arsenic | ND | 0.0040 | | |
| | Cadmium | ND | 0.00025 | | |
| | Chromium | ND | 0.020 | | |
| | Copper | ND | 0.020 | | |
| | Lead | ND | 0.0040 | | |
| | Mercury | ND | 0.020 | | |
| | Nickel | ND | 0.050 | | |
| | Zinc | ND | 0.050 | | |

PRELIMINARY REPORT
This report has not yet been reviewed by the NCA Quality Control Dept. Results are subject to final review.

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report

** 400-1

SCOEPA00035888

BENCHSHEET

FLUORIDE ANALYSIS

Test Date: 15Mar95 Sample Date: 15Mar95 Analyst: TJR

Slope: -56.2 (Range: -54 to -60 mV)

Standards:

1.0 mg/L: Lot #: 490523 Date Opened: 30Jun95

10.0 mg/L: Lot #: 490610 Date Opened: 30Jun95

Data:

| Sample | Fluoride, mg/L |
|---|---|
| CE (composite) | 7.0 |
| OWW (composite) | 0.7 |
| | |
| | |
| | |
| | |

Quality Control: Spike each of the above samples with 0.1 ml of 1000 mg/L Standard. The Fluoride concentration should increase by 2.0 mg/L.

| | CE | OWW |
|---|---|---|
| After Spike Concentration: | 9.0 mg/L | 2.5 mg/L |
| % Recovery: | 100 % | 90 % |

Comments: _____

_____

_____

References:

1. Standard Methods For The Examination of Water And Wastewater, 1992, 18th Edition, Section 4500-F C, page 4-61.
2. Orion Research Manual for the Fluoride Electrode, Model 940900, 1991.


TJR 6 Apr 87
TJR 6 Apr 93 Revised

SCOEPA00035889

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

April 11, 1995

SER15:SA

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1120 S.W. Fifth Avenue, Room 400
Portland, OR 97204-1972

Dear Mr. Anderson:

Enclosed is the March Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. As indicated, all data is in compliance with permit parameters.

If you have any questions, please contact Chip Bloomer at 243-2020 extension 7132.

Very truly yours,

WACKER SILTRONIC CORPORATION

Murray M. Tilson, P.E.
Director of Manufacturing Support

enclosure:

1) Industrial Discharge Report
2) Bench Sheet Data

cc: Tom Rothschild



SCOEPA00035890

Murray Tilson

Z 777 067 475

**Receipt for Certified Mail**

**No Insurance Coverage Provided**
**Do not use for International Mail**
**(See Reverse)**

| | |
|---|---|
| Sent to STEVE ANDERSON CITY OF PORT. - BUR. ENV. SERV. | |
| Street and No. 1120 S.W. 5th AVE - RM. 400 | |
| P.O., State and ZIP Code PORTLAND, OR. 97204 | |
| Postage | $ .32 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, and Addressee's Address | |
| TOTAL Postage & Fees | $2.52 |
| Postmark or Date | |

PORTLAND OR SAINT JOHNS STA
APR 12 1995
USPS

PS Form 3800, March 1993

SCOEPA00035891

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
STEVE ANDERSON
INDUSTRIAL WASTE Mgmt.
CITY OF. PORTLAND.
BUR. ENVIR. SERV,
1120 S.W. 5th. AVE.- Room 400
PORTLAND, OR. 97204-1972

4a. Article Number
Z 777.067.477

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
23 APR 92

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

SCOEPA00035892

UNITED STATES POSTAL SERVICE

Official Business

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, $300

U.S. MAIL

Print your name, address and ZIP Code here

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

Murray Tilson

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

STRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: April 15, 1995

SAMPLING PERIOD: March 1995

TODAY'S DATE: 10 April 1995

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

X PERIODIC COMPLIANCE

☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | March 1995 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 15 MAR 95 | DATE OF SAMPLE ANAL. > | 15 MAR 95 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Fluoride | 797 | 0.7 ~~attach summary~~ | 30.0 | | NO | 15 March 1995 |
| Arsenic | 710 | < 0.004 | 0.3 | | NO | 10 March 1995 * |
| Cadmium | 736 | .0.00025 | 0.7 | | NO | " " " * |
| Chromium | 748 | < 0.02 | 3.8 | | NO | " " " * |
| Zinc | 874 | < 0.05 | 4.0 | | NO | " " " * |
| Copper | 752 | < 0.02 | 2.3 | | NO | " " " * |
| Lead | 811 | < 0.004 | 0.7 | | NO | " " " * |
| Mercury | | < 0.02 | 0.014 | | NO | " " " * |
| ickel | 824 | < 0.05 | 3.0 | | NO | " " " * |

* SPLIT WITH CITY OF PORTLAND

| SAMPLE DATE > | Contin-uous | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | __ COMPOSITE XX GRAB | DATE RECEIVED AT LAB > | NA | DATE OF SAMPLE ANAL.> | NA |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organics (No analysis required) | 858 | | 1.37 | | | TTO CERTIFICATION (See Statement Below) |
| pH | 843 | Within Limits | 5.5-11.5 | | NO | Attach Form 13-1C |
| | | | | | | |
| | | | | | | |
| | | | | | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

"Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation (or pretreatment standard) for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no discharge of toxic organics into the wastewaters in excess of the TTO limit has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting (or control) authority."

WACKER SILTRONIC CORPORATION BY:

Signature: _____ ~~Date:~~ 4/11/95

form 13-1A.fil
rev. 6/24/94

SCOEPA00035894

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 April 1995

SAMPLING PERIOD: March 1995

TODAY'S DATE: 10 April 1995

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

x PERIODIC COMPLIANCE

☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | OWW Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

NO EXCURSIONS

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:

Signature: [signature] Date: 4/4/95

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
TDD (503) 241-7519

March 13, 1995 SER10:SA

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1120 S.W. Fifth Avenue, Room 400
Portland, Oregon 97204-1972

Dear Mr. Anderson

Enclosed is the February Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. As indicated, all data is in compliance with permit parameters.

If you have any questions, please contact Chip Bloomer at 243-2020 ext 132.

Very truly yours,

WACKER SILTRONIC CORPORATION

Murray M. Tilson
Director Manufacturing Support

enclosure:
(1) Industrial Discharge Report
(2) Bench Sheet Data

cc: Tom Rothschild



SCOEPA00035896

Wilson

Z 777 067 456

**Receipt for Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

| | |
|---|---|
| Sent to STEVE ANDERSON CITY OF PORT. - BUR. ENVIR. SERV. | |
| Street and No. 1120 S.W. 5th. AVE - Rm 400 | |
| P.O., State and ZIP Code PORTLAND, OR. 97204-1972 | |
| Postage | $ .32 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | .50 |
| Return Receipt Showing to Whom, Date, and Addressee's Address | |
| TOTAL Postage & Fees | $ 2.52 |
| Postmark or Date | MAR 1 1993 PORTLAND, OR ST JOHNS BR |

PS Form 3800, March 1993

SCOEPA00035897

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Steve Anderson
Industrial Waste Manager
City of Portland
Bureau of Environmental Serv.
1120 S.W. 5th. Ave - Room 400
Portland, Or. 97204-1972

4a. Article Number

Z 777 067 456

4b. Service Type

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

MAR 15 1995

5. Signature (Addressee)

Angela Peschke

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

SOURCE CORP

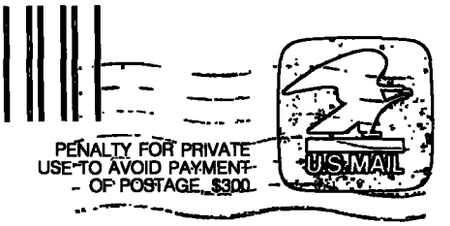
PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

SCOEPA00035898

UNITED STATES POSTAL SERVICE

Official Business




Print your name, address and ZIP Code here

WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180

Tilson

SCOEPA00035899

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

JSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: March 15, 1995

SAMPLING PERIOD: February 1995

TODAY'S DATE: 9 March 1995

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | Feb 95 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 8 Feb 95 | DATE OF SAMPLE ANAL. > | 8 Feb 95 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Fluoride | 797 | 0.2 ~~Attach Summary.~~ | 30.0 | | NO | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| SAMPLE DATE > | Contin-uous | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | __ COMPOSITE XX GRAB | DATE RECEIVED AT LAB > | NA | DATE OF SAMPLE ANAL.> | NA |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organics (No analysis required) | 858 | [illegible] | 1.37 | | | TTO CERTIFICATION (See Statement Below) |
| pH | 843 | Within Limits | 5.5-11.5 | | NO | Attach Form 13-1C |
| | | | | | | |
| | | | | | | |
| | | | | | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

"Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation (or pretreatment standard) for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no discharge of toxic organics into the wastewaters in excess of the TTO limit has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan su[illegible]ted to the permitting (or control) authority."

WACKER SILTRONIC CORPORATION BY:
Signature: [signature] Date: 3/13/95

form 13-1A.fil
rev. 6/24/94

SCOEPA00035900

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: 15 March 1995

SAMPLING PERIOD: February 1995

TODAY'S DATE: 9 March 1995

REPORT TYPE (CHECK ONE):

☐ BASELINE MONITORING

x PERIODIC COMPLIANCE

☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * * * * * * *
(For City Use Only)
* * * * * * * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | OWW Parschall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

NO EXCURSIONS

pH CODE 843

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:
Signature: [signature] Date: 3/13/95

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

**Wacker Siltronic Corporation**
P.O. Box 83180
Portland, OR 97283-0180
Phone (503) 243-2020
FAX (503) 241-7598
TDD (503) 241-7519

February 10, 1995 SER 005:CB

Steve Anderson
Industrial Waste Management
City of Portland
Bureau of Environmental Services
1120 S.W. Fifth Avenue, Room 400
Portland, Oregon 97204-1972

Dear Mr. Anderson

Enclosed is the January Industrial Discharge Report for Wacker Siltronic Corporation Municipal Discharge Permit 469-01. As indicated, all data is in compliance with permit parameters.

If you have any questions, please contact Chip Bloomer at 243-2020 ext 132.

Very truly yours,

WACKER SILTRONIC CORPORATION

Murray M. Tilson
Director Manufacturing Support

enclosure:
(1) Industrial Discharge Report
(2) Bench Sheet Data

cc: Tom Rothschild

CHIP BLOOMER

Z 777 067 444

**Receipt for Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

| | |
|---|---|
| Sent to STEVE ANDERSON CITY PORTLAND-BUR. ENVIR. SERV | |
| Street and No. 1120 S.W. 5th. AVE - Rm 400 | |
| P.O., State and ZIP Code PORTLAND, OR. 97204-1972 | |
| Postage | $ .32 |
| Certified Fee | 1.10 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | 1.10 |
| Return Receipt Showing to Whom, Date, and Addressee's Address | |
| TOTAL Postage & Fees | $2.52 |
| Postmark or Date | USPS FEB 14 1995 |

'S Form 3800, March 1993

SCOEPA00035903

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Steve Anderson
City of Portland
Bur. Environmental Services
1120 S.W. 5th. Ave - Room 400
Portland, Or. 97204-1972

4a. Article Number
Z 777.067.444

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
FEB 15 1995

5. Signature (Addressee)
Angela Peachey

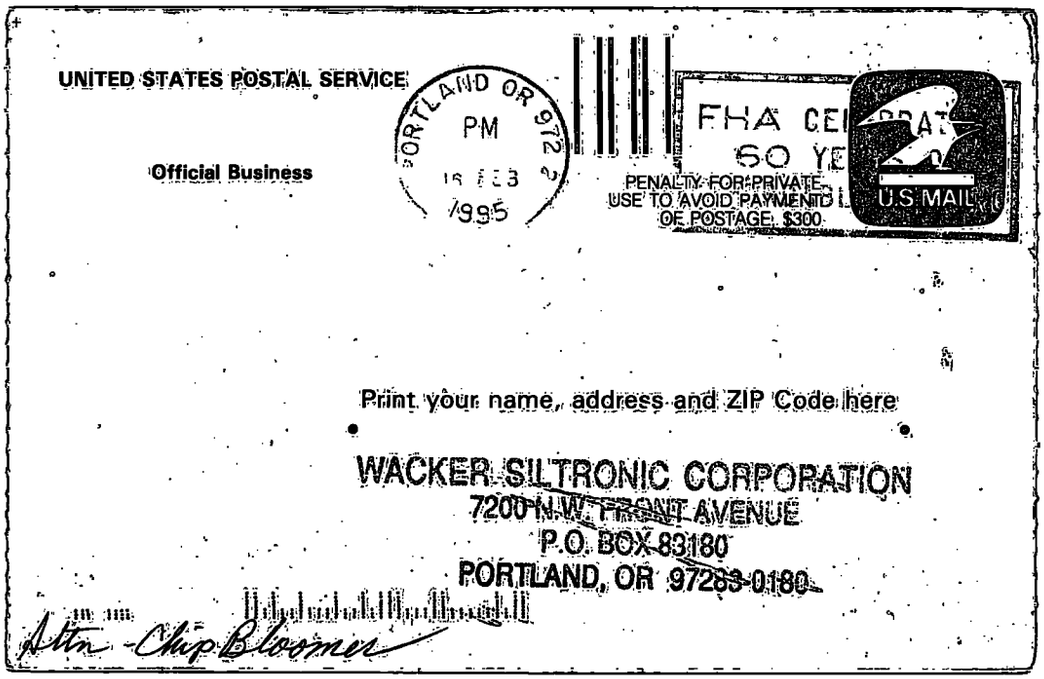
6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

SCOEPA00035904


UNITED STATES POSTAL SERVICE
Official Business
PORTLAND OR 972
PM
FEB
1995
PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300
U.S. MAIL
Print your name, address and ZIP Code here
WACKER SILTRONIC CORPORATION
7200 N.W. FRONT AVENUE
P.O. BOX 83180
PORTLAND, OR 97283-0180
Attn - Chip Bloomer

# CITY OF PORTLAND
# INDUSTRIAL DISCHARGE REPORT

* * * * * * * * * * * * * * * * * * *

(For City Use Only)

INDUSTRY NAME: Wacker Siltronic Corporation

PERMIT NUMBER: 469-001

REPORT DUE DATE: February 15, 1995

SAMPLING PERIOD: January 1995

TODAY'S DATE: 10 February 1995

REPORT TYPE (CHECK ONE):

- ☐ BASELINE MONITORING
- X PERIODIC COMPLIANCE
- ☐ FINAL COMPLIANCE

* * * * * * * * * * * * * * * * * * *

| SAMPLE DATE > | Jan. '95 | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | XX COMPOSITE __ GRAB | DATE RECEIVED AT LAB > | 11 JAN 95 | DATE OF SAMPLE ANAL. > | 11 JAN 95 |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Fluoride | 797 | 2.6 ~~Attach Summary.~~ | 30.0 | | NO | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| SAMPLE DATE > | Contin-uous | SAMPLE LOCATION> | OWW PARSHALL FLUME | SAMPLE TYPE > | __ COMPOSITE XX GRAB | DATE RECEIVED AT LAB > | NA | DATE OF SAMPLE ANAL.> | NA |
|---|---|---|---|---|---|---|---|---|---|

| PARAMETER | CODE | REPORTED CONCENTRATION mg/L | LIMIT mg/L Daily | LIMIT mg/L Monthly | DISCHARGE VIOLATION ? YES or NO | COMMENTS |
|---|---|---|---|---|---|---|
| Total Toxic Organics (No analysis required) | 858 | --- | 1.37 | | | TTO CERTIFICATION (See Statement Below) |
| pH | 843 | Within Limits | 5.5-11.5 | | NO | Attach Form 13-1C |
| | | | | | | |
| | | | | | | |
| | | | | | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

"Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation (or pretreatment standard) for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no discharge of toxic organics into the wastewaters in excess of the TTO limit has occurred since filing of the last di[illegible]arge monitoring report. I further certify that this facility is implementing the toxic organic management plan su[illegible]ted to the permitting (or control) authority."

WACKER SILTRONIC CORPORATION

Signature: _____ Date: 2/10/95

form 13-1A.fil
rev. 6/24/94

SCOEPA00035906

**CITY OF PORTLAND**
**INDUSTRIAL CONTINUOUSLY MONITORED**
**pH REPORT FORM 13-1C**

* * * * * * * * * * * * * * * * * *
(For City Use Only)

**INDUSTRY NAME:** Wacker Siltronic Corporation
**PERMIT NUMBER:** 469-001
**REPORT DUE DATE:** 15 February 1995
**SAMPLING PERIOD:** January 1995
**TODAY'S DATE:** 10 February 1995

**REPORT TYPE (CHECK ONE):**
- ☐ BASELINE MONITORING
- x PERIODIC COMPLIANCE
- ☐ SPECIAL COMPLIANCE

* * * * * * * * * * * * * * * * * *

| SAMPLE LOCATION> | OWW Parshall Flume | METER BRAND | Foxboro | METER MODEL | 761 | pH LIMIT: 5.5--11.5 |
|---|---|---|---|---|---|---|

No. Excursions

**pH CODE 843**

| # | DATE | STARTING TIME (Use Military time) | MOST EXTREME pH EXCURSION VALUE | DURATION in Minutes | CLAIMED NON-VIOLATION | VIOLATION LEVEL | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |
| | | : | SU | | y n | | |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WACKER SILTRONIC CORPORATION BY:
Signature: _____ Date: 2/10/95

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

INSTRUCTIONS: Source Control must be notified of all discharge violations within 24 hours of your knowledge of violation. Report all apparent pH violations on this form even if you claim they represent a non-violation.

VIOLATIONS:
1. pH excursions outside your permit range for a total duration of more than 15 minutes in any 24 hour period.
2. pH excursions outside the range 5.0-12.5 regardless of duration.

CLAIMED NON-VIOLATIONS:
The pH recorder chart shows an apparent violation but the industry claims this did not represent a discharge pH violation. List in this report all claimed non-violations and circle the "y" in the claimed non-violation column. State in the comments column why you claim this does not represent a pH discharge. Attach a detailed explanation with supporting documentation to this report. When the claimed non-violation was due to equipment failure or human error, describe the corrective measures taken and when pH monitoring returned to normal. Failure to properly claim and document a non-violation may result in citation for a pH violation.

form 13-1C
rev. 6/24/94

SCOEPA00035907

1.888.345.0881

# Bridge City

L E G A L

the litigation management specialists

| firm | box | Corporate Environmental Box 4<br>Siltronic/Davis Rothwell<br>Contact: Greg Scott (971)570-5806 |
|---|---|---|

notes

SCOEPA00035908

# Historical Analytical Report for 01/01/2003 - 12/31/2003

Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **1200Z**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| cod | = | 23.1 | mg/L | self | grab | 05/15/2003 10:10 AM | 01 |
| cod | = | 20.6 | mg/L | self | grab | 05/15/2003 10:00 AM | 02 |
| cod | = | 32.8 | mg/L | self | grab | 05/15/2003 10:30 AM | 03 |
| **cod** | | | **Minimum** | **20.6000 mg/L** | | **Count 3** | |
| | | | **Average** | **25.5000 mg/L** | | | |
| | | | **Maximum** | **32.8000 mg/L** | | | |
| copper | < | 0.03 | mg/L | self | grab | 05/15/2003 10:10 AM | 01 |
| copper | < | 0.03 | mg/L | self | grab | 05/15/2003 10:00 AM | 02 |
| copper | < | 0.03 | mg/L | self | grab | 05/15/2003 10:30 AM | 03 |
| **copper** | | | **Minimum** | **0.0150 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0150 mg/L** | | | |
| | | | **Maximum** | **0.0150 mg/L** | | | |
| fluoride | = | 0.3 | mg/L | self | grab | 05/15/2003 10:10 AM | 01 |
| fluoride | = | 5.7 | mg/L | self | grab | 05/15/2003 10:00 AM | 02 |
| fluoride | = | 0.18 | mg/L | self | grab | 05/15/2003 10:30 AM | 03 |
| **fluoride** | | | **Minimum** | **0.1800 mg/L** | | **Count 3** | |
| | | | **Average** | **2.0600 mg/L** | | | |
| | | | **Maximum** | **5.7000 mg/L** | | | |
| lead | < | 0.005 | mg/L | self | grab | 05/15/2003 10:10 AM | 01 |
| lead | < | 0.005 | mg/L | self | grab | 05/15/2003 10:00 AM | 02 |
| lead | < | 0.005 | mg/L | self | grab | 05/15/2003 10:30 AM | 03 |
| **lead** | | | **Minimum** | **0.0025 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| oil/grease - total | < | 3 | mg/L | self | grab | 05/15/2003 10:10 AM | 01 |
| oil/grease - total | < | 3 | mg/L | self | grab | 05/15/2003 10:00 AM | 02 |
| oil/grease - total | < | 3 | mg/L | self | grab | 05/15/2003 10:30 AM | 03 |
| **oil/grease - total** | | | **Minimum** | **1.5000 mg/L** | | **Count 3** | |
| | | | **Average** | **1.5000 mg/L** | | | |
| | | | **Maximum** | **1.5000 mg/L** | | | |
| pH | = | 7.12 | std units | self | grab | 05/15/2003 10:10 AM | 01 |
| pH | = | 7.12 | std units | self | grab | 05/15/2003 10:00 AM | 02 |
| pH | = | 6.46 | std units | self | grab | 05/15/2003 10:30 AM | 03 |
| **pH** | | | **Minimum** | **6.4600 std units** | | **Count 3** | |
| | | | **Maximum** | **7.1200 std units** | | | |
| solids - total suspended | = | 5.5 | mg/L | self | grab | 05/15/2003 10:10 AM | 01 |
| solids - total suspended | = | 2.4 | mg/L | self | grab | 05/15/2003 10:00 AM | 02 |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **1200Z**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| solids - total suspended | = | 14.7 | mg/L | self | grab | 05/15/2003 10:30 AM | 03 |
| **solids - total suspended** | | | **Minimum** | **2.4000 mg/L** | | **Count 3** | |
| | | | **Average** | **7.5333 mg/L** | | | |
| | | | **Maximum** | **14.7000 mg/L** | | | |
| zinc | = | 0.26 | mg/L | self | grab | 05/15/2003 10:10 AM | 01 |
| zinc | = | 0.23 | mg/L | self | grab | 05/15/2003 10:00 AM | 02 |
| zinc | = | 0.17 | mg/L | self | grab | 05/15/2003 10:30 AM | 03 |
| **zinc** | | | **Minimum** | **0.1700 mg/L** | | **Count 3** | |
| | | | **Average** | **0.2200 mg/L** | | | |
| | | | **Maximum** | **0.2600 mg/L** | | | |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-tetrachloroethane | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,1,1,2-tetrachloroethane** | | **Minimum** | | **0.0010 mg/L** | | **Count 10** | |
| | | **Average** | | **0.0042 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1,1-trichloroethane | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,1,1-trichloroethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,1,1-trichloroethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,1,1-trichloroethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,1,1-trichloroethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,1,1-trichloroethane | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,1,1-trichloroethane** | | **Minimum** | | **0.0010 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0037 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1,2,2-tetrachloroethane | < | 0.003 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.003 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,1,2,2-tetrachloroethane** | | **Minimum** | | **0.0015 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0038 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1,2-trichloroethane | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,1,2-trichloroethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,1,2-trichloroethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,1,2-trichloroethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,1,2-trichloroethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,1,2-trichloroethane | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,1,2-trichloroethane** | | **Minimum** | | **0.0010 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0037 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1-dichloroethane | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,1-dichloroethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,1-dichloroethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,1-dichloroethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,1-dichloroethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,1-dichloroethane | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,1-dichloroethane** | | | **Minimum** | **0.0010 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0037 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,1-dichloroethene | < | 0.005 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,1-dichloroethene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,1-dichloroethene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,1-dichloroethene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,1-dichloroethene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,1-dichloroethene | < | 0.005 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,1-dichloroethene** | | | **Minimum** | **0.0025 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0042 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,1-dichloropropene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,1-dichloropropene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,1-dichloropropene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,1-dichloropropene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,1-dichloropropene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2,3-trichlorobenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,2,3-trichlorobenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,2,3-trichlorobenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,2,3-trichlorobenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,2,3-trichlorobenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2,3-trichloropropane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,2,3-trichloropropane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,2,3-trichloropropane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,2,3-trichloropropane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,2,3-trichloropropane** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2,4-trichlorobenzene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,2,4-trichlorobenzene** | | | **Minimum** | **0.0025 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0042 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2,4-trimethylbenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,2,4-trimethylbenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,2,4-trimethylbenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,2,4-trimethylbenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,2,4-trimethylbenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,2-dibromo-3-chloropropane** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,2-dibromoethane** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichlorobenzene | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,2-dichlorobenzene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,2-dichlorobenzene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,2-dichlorobenzene | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,2-dichlorobenzene** | | | **Minimum** | **0.0010 mg/L** | | **Count 8** | |
| | | | **Average** | **0.0034 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichloroethane | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,2-dichloroethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,2-dichloroethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,2-dichloroethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,2-dichloroethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,2-dichloroethane | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,2-dichloroethane** | | | **Minimum** | **0.0010 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0037 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichloroethene (cis) | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,2-dichloroethene (cis) | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,2-dichloroethene (cis) | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,2-dichloroethene (cis) | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,2-dichloroethene (cis)** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichloroethene (trans) | < | 0.003 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.003 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,2-dichloroethene (trans)** | | | **Minimum** | **0.0015 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichloropropane | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,2-dichloropropane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,2-dichloropropane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,2-dichloropropane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,2-dichloropropane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,2-dichloropropane | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,2-dichloropropane** | | | **Minimum** | **0.0010 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0037 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,3,5-trimethylbenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,3,5-trimethylbenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,3,5-trimethylbenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,3,5-trimethylbenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,3,5-trimethylbenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,3-dichlorobenzene | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,3-dichlorobenzene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,3-dichlorobenzene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,3-dichlorobenzene | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,3-dichlorobenzene** | | | **Minimum** | **0.0010 mg/L** | | **Count 8** | |
| | | | **Average** | **0.0034 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,3-dichloropropane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,3-dichloropropane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,3-dichloropropane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,3-dichloropropane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,3-dichloropropane** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,3-dichloropropene (cis) | < | 0.003 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.003 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,3-dichloropropene (cis)** | | | **Minimum** | **0.0015 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,3-dichloropropene (trans) | < | 0.003 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.003 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,3-dichloropropene (trans)** | | | **Minimum** | **0.0015 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,4-dichloro-2-butene (cis) | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,4-dichloro-2-butene (cis) | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,4-dichloro-2-butene (cis) | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,4-dichloro-2-butene (cis) | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,4-dichloro-2-butene (cis)** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,4-dichloro-2-butene (trans) | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,4-dichloro-2-butene (trans) | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,4-dichloro-2-butene (trans) | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,4-dichloro-2-butene (trans) | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **1,4-dichloro-2-butene (trans)** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,4-dichlorobenzene | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 1,4-dichlorobenzene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 1,4-dichlorobenzene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 1,4-dichlorobenzene | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **1,4-dichlorobenzene** | | **Minimum** | | **0.0010 mg/L** | | **Count 8** | |
| | | **Average** | | **0.0034 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 2,2-dichloropropane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 2,2-dichloropropane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 2,2-dichloropropane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 2,2-dichloropropane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **2,2-dichloropropane** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 2,4,6-trichlorophenol | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 2,4,6-trichlorophenol | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **2,4,6-trichlorophenol** | | **Minimum** | | **0.0025 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0025 mg/L** | | | |
| | | **Maximum** | | **0.0025 mg/L** | | | |
| 2,4-dichlorophenol | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 2,4-dichlorophenol | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **2,4-dichlorophenol** | | **Minimum** | | **0.0025 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0025 mg/L** | | | |
| | | **Maximum** | | **0.0025 mg/L** | | | |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 2,4-dimethylphenol | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 2,4-dimethylphenol | < | 0.01 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **2,4-dimethylphenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2,4-dinitrophenol | < | 0.02 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 2,4-dinitrophenol | < | 0.02 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **2,4-dinitrophenol** | | | **Minimum** | **0.0100 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0100 mg/L** | | | |
| | | | **Maximum** | **0.0100 mg/L** | | | |
| 2,4-dinitrotoluene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 2,4-dinitrotoluene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **2,4-dinitrotoluene** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| 2,6-dinitrotoluene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 2,6-dinitrotoluene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **2,6-dinitrotoluene** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| 2-butanone | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 2-butanone | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 2-butanone | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 2-butanone | = | 0.013 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **2-butanone** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0070 mg/L** | | | |
| | | | **Maximum** | **0.0130 mg/L** | | | |
| 2-chloroethylvinyl ether | < | 0.025 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| 2-chloroethylvinyl ether | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 2-chloroethylvinyl ether | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 2-chloroethylvinyl ether | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 2-chloroethylvinyl ether | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| 2-chloroethylvinyl ether | < | 0.025 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **2-chloroethylvinyl ether** | | | **Minimum** | **0.0050 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0075 mg/L** | | | |
| | | | **Maximum** | **0.0125 mg/L** | | | |
| 2-chloronaphthalene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 2-chloronaphthalene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **2-chloronaphthalene** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| 2-chlorophenol | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 2-chlorophenol | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **2-chlorophenol** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| 2-chlorotoluene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 2-chlorotoluene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 2-chlorotoluene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 2-chlorotoluene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **2-chlorotoluene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-hexanone | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 2-hexanone | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 2-hexanone | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 2-hexanone | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **2-hexanone** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-methyl-4,6-dinitrophenol | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 2-methyl-4,6-dinitrophenol | < | 0.01 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **2-methyl-4,6-dinitrophenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-nitrophenol | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 2-nitrophenol | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **2-nitrophenol** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| 3,3'-dichlorobenzidine | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 3,3'-dichlorobenzidine | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **3,3'-dichlorobenzidine** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 4-bromophenyl phenyl ether | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 4-bromophenyl phenyl ether | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **4-bromophenyl phenyl ether** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| 4-chloro-3-methylphenol | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 4-chloro-3-methylphenol | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **4-chloro-3-methylphenol** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| 4-chlorophenyl phenyl ether | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| 4-chlorophenyl phenyl ether | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **4-chlorophenyl phenyl ether** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| 4-chlorotoluene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 4-chlorotoluene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 4-chlorotoluene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 4-chlorotoluene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **4-chlorotoluene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 4-isopropyltoluene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 4-isopropyltoluene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 4-isopropyltoluene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 4-isopropyltoluene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **4-isopropyltoluene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 4-methyl-2-pentanone | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| 4-methyl-2-pentanone | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| 4-methyl-2-pentanone | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| 4-methyl-2-pentanone | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **4-methyl-2-pentanone** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 4-nitrophenol | < | 0.02 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 4-nitrophenol | < | 0.02 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **4-nitrophenol** | | | **Minimum** | **0.0100 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0100 mg/L** | | | |
| | | | **Maximum** | **0.0100 mg/L** | | | |
| acenaphthene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| acenaphthene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **acenaphthene** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| acenaphthylene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| acenaphthylene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **acenaphthylene** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| acetone | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| acetone | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| acetone | = | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| acetone | = | 1.7 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **acetone** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.4300 mg/L** | | | |
| | | | **Maximum** | **1.7000 mg/L** | | | |
| acetonitrile | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| acetonitrile | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| acetonitrile | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| acetonitrile | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **acetonitrile** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| acrolein | < | 0.01 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| acrolein | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| acrolein | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| acrolein | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| acrolein | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| acrolein | < | 0.01 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **acrolein** | | | **Minimum** | **0.0050 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| acrylonitrile | < | 0.01 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| acrylonitrile | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| acrylonitrile | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| acrylonitrile | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| acrylonitrile | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| acrylonitrile | < | 0.01 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **acrylonitrile** | | **Minimum** | | **0.0050 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| anthracene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| anthracene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **anthracene** | | **Minimum** | | **0.0025 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0025 mg/L** | | | |
| | | **Maximum** | | **0.0025 mg/L** | | | |
| arsenic | < | 0.001 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| arsenic | < | 0.001 | mg/L | self | composite | 03/06/2003 6:35 AM | 1B |
| arsenic | = | 0.0026 | mg/L | city | composite | 05/05/2003 10:00 AM | 1B |
| arsenic | < | 0.0025 | mg/L | self | composite | 06/05/2003 9:30 AM | 1B |
| arsenic | = | 0.00192 | mg/L | city | composite | 08/04/2003 12:57 PM | 1B |
| arsenic | = | 0.007 | mg/L | self | composite | 09/04/2003 7:40 AM | 1B |
| arsenic | = | 0.0014 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| arsenic | < | 0.0025 | mg/L | self | composite | 12/04/2003 7:45 AM | 1B |
| **arsenic** | | **Minimum** | | **0.0005 mg/L** | | **Count 8** | |
| | | **Average** | | **0.0021 mg/L** | | | |
| | | **Maximum** | | **0.0070 mg/L** | | | |
| azobenzene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| azobenzene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **azobenzene** | | **Minimum** | | **0.0025 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0025 mg/L** | | | |
| | | **Maximum** | | **0.0025 mg/L** | | | |
| benzene | < | 0.003 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| benzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| benzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| benzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| benzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| benzene | < | 0.003 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **benzene** | | **Minimum** | | **0.0015 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0038 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| benzidine | < | 0.05 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| benzidine | < | 0.05 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **benzidine** | | **Minimum** | | **0.0250 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0250 mg/L** | | | |
| | | **Maximum** | | **0.0250 mg/L** | | | |
| benzo(a)anthracene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| benzo(a)anthracene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **benzo(a)anthracene** | | **Minimum** | | **0.0025 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0025 mg/L** | | | |
| | | **Maximum** | | **0.0025 mg/L** | | | |
| benzo(a)pyrene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| benzo(a)pyrene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **benzo(a)pyrene** | | **Minimum** | | **0.0025 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0025 mg/L** | | | |
| | | **Maximum** | | **0.0025 mg/L** | | | |
| benzo(b)fluoranthene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| benzo(b)fluoranthene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **benzo(b)fluoranthene** | | **Minimum** | | **0.0025 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0025 mg/L** | | | |
| | | **Maximum** | | **0.0025 mg/L** | | | |
| benzo(g,h,i)perylene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| benzo(g,h,i)perylene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **benzo(g,h,i)perylene** | | **Minimum** | | **0.0025 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0025 mg/L** | | | |
| | | **Maximum** | | **0.0025 mg/L** | | | |
| benzo(k)fluoranthene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| benzo(k)fluoranthene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **benzo(k)fluoranthene** | | **Minimum** | | **0.0025 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0025 mg/L** | | | |
| | | **Maximum** | | **0.0025 mg/L** | | | |
| bis(2-chloroethoxy) methane | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| bis(2-chloroethoxy) methane | < | 0.01 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **bis(2-chloroethoxy) methane** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| bis(2-chloroethyl) ether | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| bis(2-chloroethyl) ether | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **bis(2-chloroethyl) ether** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| bis(2-chloroisopropyl) ether | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| bis(2-chloroisopropyl) ether | < | 0.01 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **bis(2-chloroisopropyl) ether** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bis(2-ethylhexyl)phthalate | = | 0.0465 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| bis(2-ethylhexyl)phthalate | = | 0.788 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **bis(2-ethylhexyl)phthalate** | | | **Minimum** | **0.0465 mg/L** | | **Count 2** | |
| | | | **Average** | **0.4173 mg/L** | | | |
| | | | **Maximum** | **0.7880 mg/L** | | | |
| bromobenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| bromobenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| bromobenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| bromobenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **bromobenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bromochloromethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| bromochloromethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| bromochloromethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| bromochloromethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **bromochloromethane** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bromodichloromethane | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| bromodichloromethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| bromodichloromethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| bromodichloromethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| bromodichloromethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| bromodichloromethane | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **bromodichloromethane** | | | **Minimum** | **0.0010 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0037 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bromoform | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| bromoform | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| bromoform | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| bromoform | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| bromoform | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| bromoform | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **bromoform** | | **Minimum** | **0.0010 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0037 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| bromomethane | < | 0.005 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| bromomethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| bromomethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| bromomethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| bromomethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| bromomethane | < | 0.005 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **bromomethane** | | **Minimum** | **0.0025 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0042 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| butyl benzyl phthalate | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| butyl benzyl phthalate | < | 0.01 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **butyl benzyl phthalate** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| cadmium | < | 0.03 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| **cadmium** | | **Minimum** | **0.0150 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0150 mg/L** | | | | |
| | | **Maximum** | **0.0150 mg/L** | | | | |
| carbon disulfide | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| carbon disulfide | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| carbon disulfide | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| carbon disulfide | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **carbon disulfide** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| carbon tetrachloride | < | 0.003 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| carbon tetrachloride | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| carbon tetrachloride | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| carbon tetrachloride | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| carbon tetrachloride | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| carbon tetrachloride | < | 0.003 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **carbon tetrachloride** | | | **Minimum** | **0.0015 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| chlorobenzene | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| chlorobenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| chlorobenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| chlorobenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| chlorobenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| chlorobenzene | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **chlorobenzene** | | | **Minimum** | **0.0010 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0037 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| chloroethane | < | 0.005 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| chloroethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| chloroethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| chloroethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| chloroethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| chloroethane | < | 0.005 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **chloroethane** | | | **Minimum** | **0.0025 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0042 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| chloroform | = | 0.0054 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| chloroform | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| chloroform | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| chloroform | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| chloroform | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| chloroform | = | 0.0021 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **chloroform** | | | **Minimum** | **0.0021 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0046 mg/L** | | | |
| | | | **Maximum** | **0.0054 mg/L** | | | |
| chloromethane | < | 0.005 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| chloromethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| chloromethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| chloromethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| chloromethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| chloromethane | < | 0.005 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **chloromethane** | | | **Minimum** | **0.0025 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0042 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| chromium | < | 0.05 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| **chromium** | | **Minimum** | **0.0250 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0250 mg/L** | | | | |
| | | **Maximum** | **0.0250 mg/L** | | | | |
| chrysene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| chrysene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **chrysene** | | **Minimum** | **0.0025 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0025 mg/L** | | | | |
| | | **Maximum** | **0.0025 mg/L** | | | | |
| copper | < | 0.05 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| **copper** | | **Minimum** | **0.0250 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0250 mg/L** | | | | |
| | | **Maximum** | **0.0250 mg/L** | | | | |
| dibenzo(a,h)anthracene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| dibenzo(a,h)anthracene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **dibenzo(a,h)anthracene** | | **Minimum** | **0.0025 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0025 mg/L** | | | | |
| | | **Maximum** | **0.0025 mg/L** | | | | |
| dibromochloromethane | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| dibromochloromethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| dibromochloromethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| dibromochloromethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| dibromochloromethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| dibromochloromethane | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **dibromochloromethane** | | **Minimum** | **0.0010 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0037 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| dibromomethane | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| dibromomethane | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| dibromomethane | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| dibromomethane | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **dibromomethane** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| dichlorodifluoromethane (freon-12) | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| dichlorodifluoromethane (freon-12) | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| dichlorodifluoromethane (freon-12) | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| dichlorodifluoromethane (freon-12) | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **dichlorodifluoromethane (freon-12)** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| diethyl phthalate | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| diethyl phthalate | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **diethyl phthalate** | | **Minimum** | **0.0025 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0025 mg/L** | | | | |
| | | **Maximum** | **0.0025 mg/L** | | | | |
| dimethyl phthalate | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| dimethyl phthalate | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **dimethyl phthalate** | | **Minimum** | **0.0025 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0025 mg/L** | | | | |
| | | **Maximum** | **0.0025 mg/L** | | | | |
| di-n-butyl phthalate | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| di-n-butyl phthalate | < | 0.01 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **di-n-butyl phthalate** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| di-n-octyl phthalate | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| di-n-octyl phthalate | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **di-n-octyl phthalate** | | **Minimum** | **0.0025 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0025 mg/L** | | | | |
| | | **Maximum** | **0.0025 mg/L** | | | | |
| ethyl benzene | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| ethyl benzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| ethyl benzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| ethyl benzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| ethyl benzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| ethyl benzene | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **ethyl benzene** | | **Minimum** | **0.0010 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0037 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| fluoranthene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| fluoranthene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **fluoranthene** | | **Minimum** | **0.0025 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0025 mg/L** | | | | |
| | | **Maximum** | **0.0025 mg/L** | | | | |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| fluorene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| fluorene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **fluorene** | | **Minimum** | | **0.0025 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0025 mg/L** | | | |
| | | **Maximum** | | **0.0025 mg/L** | | | |
| fluoride | < | 1 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| fluoride | = | 2.7 | mg/L | city | composite | 05/05/2003 10:00 AM | 1B |
| fluoride | < | 1 | mg/L | city | composite | 08/04/2003 12:57 PM | 1B |
| fluoride | < | 1 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **fluoride** | | **Minimum** | | **0.5000 mg/L** | | **Count 4** | |
| | | **Average** | | **1.0500 mg/L** | | | |
| | | **Maximum** | | **2.7000 mg/L** | | | |
| hexachlorobenzene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| hexachlorobenzene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **hexachlorobenzene** | | **Minimum** | | **0.0025 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0025 mg/L** | | | |
| | | **Maximum** | | **0.0025 mg/L** | | | |
| hexachlorobutadiene | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **hexachlorobutadiene** | | **Minimum** | | **0.0050 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| hexachlorocyclopentadiene | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| hexachlorocyclopentadiene | < | 0.01 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **hexachlorocyclopentadiene** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| hexachloroethane | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| hexachloroethane | < | 0.01 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **hexachloroethane** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| indeno (1,2,3-cd) pyrene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| indeno (1,2,3-cd) pyrene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **indeno (1,2,3-cd) pyrene** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| isophorone | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| isophorone | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **isophorone** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| isopropyl alcohol | = | 13 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| isopropyl alcohol | < | 2 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| **isopropyl alcohol** | | | **Minimum** | **1.0000 mg/L** | | **Count 2** | |
| | | | **Average** | **7.0000 mg/L** | | | |
| | | | **Maximum** | **13.0000 mg/L** | | | |
| isopropylbenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| isopropylbenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| isopropylbenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| isopropylbenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **isopropylbenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| lead | < | 0.2 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| **lead** | | | **Minimum** | **0.1000 mg/L** | | **Count 1** | |
| | | | **Average** | **0.1000 mg/L** | | | |
| | | | **Maximum** | **0.1000 mg/L** | | | |
| methyl iodide | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| methyl iodide | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| methyl iodide | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| methyl iodide | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **methyl iodide** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| methylene chloride | < | 0.003 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| methylene chloride | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| methylene chloride | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| methylene chloride | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| methylene chloride | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| methylene chloride | < | 0.003 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **methylene chloride** | | **Minimum** | **0.0015 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| molybdenum | < | 0.2 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| molybdenum | < | 0.2 | mg/L | city | composite | 05/05/2003 10:00 AM | 1B |
| molybdenum | < | 0.2 | mg/L | city | composite | 08/04/2003 12:57 PM | 1B |
| molybdenum | < | 0.2 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **molybdenum** | | **Minimum** | **0.1000 mg/L** | | | **Count 4** | |
| | | **Average** | **0.1000 mg/L** | | | | |
| | | **Maximum** | **0.1000 mg/L** | | | | |
| naphthalene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| naphthalene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| naphthalene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| naphthalene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| naphthalene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| naphthalene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **naphthalene** | | **Minimum** | **0.0025 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0042 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-butylbenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| n-butylbenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| n-butylbenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| n-butylbenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **n-butylbenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| nickel | < | 0.1 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| **nickel** | | **Minimum** | **0.0500 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0500 mg/L** | | | | |
| | | **Maximum** | **0.0500 mg/L** | | | | |
| nitrobenzene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| nitrobenzene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **nitrobenzene** | | **Minimum** | **0.0025 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0025 mg/L** | | | | |
| | | **Maximum** | **0.0025 mg/L** | | | | |
| n-nitrosodimethylamine | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| n-nitrosodimethylamine | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **n-nitrosodimethylamine** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| n-nitroso-di-n-propylamine | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| n-nitroso-di-n-propylamine | < | 0.01 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **n-nitroso-di-n-propylamine** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| n-nitrosodiphenylamine | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| n-nitrosodiphenylamine | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **n-nitrosodiphenylamine** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| n-propylbenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| n-propylbenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| n-propylbenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| n-propylbenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **n-propylbenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| o-xylene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| o-xylene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| o-xylene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| o-xylene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **o-xylene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| pentachlorophenol | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| pentachlorophenol | < | 0.01 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **pentachlorophenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| pH | = | | std units | self | continuous | 01/01/2003 | 1B |
| pH | = | | std units | self | continuous | 01/02/2003 | 1B |
| pH | = | | std units | self | continuous | 01/03/2003 | 1B |
| pH | = | | std units | self | continuous | 01/04/2003 | 1B |
| pH | = | | std units | self | continuous | 01/05/2003 | 1B |
| pH | = | | std units | self | continuous | 01/06/2003 | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 01/07/2003 | 1B |
| pH | = | | std units | self | continuous | 01/08/2003 | 1B |
| pH | = | | std units | self | continuous | 01/09/2003 | 1B |
| pH | = | | std units | self | continuous | 01/10/2003 | 1B |
| pH | = | | std units | self | continuous | 01/11/2003 | 1B |
| pH | = | | std units | self | continuous | 01/12/2003 | 1B |
| pH | = | | std units | self | continuous | 01/13/2003 | 1B |
| pH | = | | std units | self | continuous | 01/14/2003 | 1B |
| pH | = | 9.9 | std units | city | grab | 01/14/2003 9:30 AM | 1B |
| pH | = | | std units | self | continuous | 01/15/2003 | 1B |
| pH | = | | std units | self | continuous | 01/16/2003 | 1B |
| pH | = | | std units | self | continuous | 01/17/2003 | 1B |
| pH | = | | std units | self | continuous | 01/18/2003 | 1B |
| pH | = | | std units | self | continuous | 01/19/2003 | 1B |
| pH | = | | std units | self | continuous | 01/20/2003 | 1B |
| pH | = | | std units | self | continuous | 01/21/2003 | 1B |
| pH | = | | std units | self | continuous | 01/22/2003 | 1B |
| pH | = | | std units | self | continuous | 01/23/2003 | 1B |
| pH | = | | std units | self | continuous | 01/24/2003 | 1B |
| pH | = | | std units | self | continuous | 01/25/2003 | 1B |
| pH | = | | std units | self | continuous | 01/26/2003 | 1B |
| pH | = | | std units | self | continuous | 01/27/2003 | 1B |
| pH | = | | std units | self | continuous | 01/28/2003 | 1B |
| pH | = | | std units | self | continuous | 01/29/2003 | 1B |
| pH | = | | std units | self | continuous | 01/30/2003 | 1B |
| pH | = | | std units | self | continuous | 01/31/2003 | 1B |
| pH | = | | std units | self | continuous | 02/01/2003 | 1B |
| pH | = | | std units | self | continuous | 02/02/2003 | 1B |
| pH | = | | std units | self | continuous | 02/03/2003 | 1B |
| pH | = | | std units | self | continuous | 02/04/2003 | 1B |
| pH | = | | std units | self | continuous | 02/05/2003 | 1B |
| pH | = | | std units | self | continuous | 02/06/2003 | 1B |
| pH | = | | std units | self | continuous | 02/07/2003 | 1B |
| pH | = | | std units | self | continuous | 02/08/2003 | 1B |
| pH | = | | std units | self | continuous | 02/09/2003 | 1B |
| pH | = | | std units | self | continuous | 02/10/2003 | 1B |
| pH | = | | std units | self | continuous | 02/11/2003 | 1B |
| pH | = | | std units | self | continuous | 02/12/2003 | 1B |
| pH | = | | std units | self | continuous | 02/13/2003 | 1B |
| pH | = | | std units | self | continuous | 02/14/2003 | 1B |
| pH | = | | std units | self | continuous | 02/15/2003 | 1B |
| pH | = | | std units | self | continuous | 02/16/2003 | 1B |
| pH | = | | std units | self | continuous | 02/17/2003 | 1B |
| pH | = | | std units | self | continuous | 02/18/2003 | 1B |
| pH | = | | std units | self | continuous | 02/19/2003 | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 02/20/2003 | 1B |
| pH | = | | std units | self | continuous | 02/21/2003 | 1B |
| pH | = | | std units | self | continuous | 02/22/2003 | 1B |
| pH | = | | std units | self | continuous | 02/23/2003 | 1B |
| pH | = | | std units | self | continuous | 02/24/2003 | 1B |
| pH | = | | std units | self | continuous | 02/25/2003 | 1B |
| pH | = | | std units | self | continuous | 02/26/2003 | 1B |
| pH | = | | std units | self | continuous | 02/27/2003 | 1B |
| pH | = | | std units | self | continuous | 02/28/2003 | 1B |
| pH | = | | std units | self | continuous | 03/01/2003 | 1B |
| pH | = | | std units | self | continuous | 03/02/2003 | 1B |
| pH | = | | std units | self | continuous | 03/03/2003 | 1B |
| pH | = | | std units | self | continuous | 03/04/2003 | 1B |
| pH | = | | std units | self | continuous | 03/05/2003 | 1B |
| pH | = | | std units | self | continuous | 03/06/2003 | 1B |
| pH | = | | std units | self | continuous | 03/07/2003 | 1B |
| pH | = | | std units | self | continuous | 03/08/2003 | 1B |
| pH | = | | std units | self | continuous | 03/09/2003 | 1B |
| pH | = | | std units | self | continuous | 03/10/2003 | 1B |
| pH | = | | std units | self | continuous | 03/11/2003 | 1B |
| pH | = | | std units | self | continuous | 03/12/2003 | 1B |
| pH | = | | std units | self | continuous | 03/13/2003 | 1B |
| pH | = | | std units | self | continuous | 03/14/2003 | 1B |
| pH | = | | std units | self | continuous | 03/15/2003 | 1B |
| pH | = | | std units | self | continuous | 03/16/2003 | 1B |
| pH | = | | std units | self | continuous | 03/17/2003 | 1B |
| pH | = | | std units | self | continuous | 03/18/2003 | 1B |
| pH | = | | std units | self | continuous | 03/19/2003 | 1B |
| pH | = | | std units | self | continuous | 03/20/2003 | 1B |
| pH | = | | std units | self | continuous | 03/21/2003 | 1B |
| pH | = | | std units | self | continuous | 03/22/2003 | 1B |
| pH | = | | std units | self | continuous | 03/23/2003 | 1B |
| pH | = | | std units | self | continuous | 03/24/2003 | 1B |
| pH | = | | std units | self | continuous | 03/25/2003 | 1B |
| pH | = | | std units | self | continuous | 03/26/2003 | 1B |
| pH | = | | std units | self | continuous | 03/27/2003 | 1B |
| pH | = | | std units | self | continuous | 03/28/2003 | 1B |
| pH | = | | std units | self | continuous | 03/29/2003 | 1B |
| pH | = | | std units | self | continuous | 03/30/2003 | 1B |
| pH | = | | std units | self | continuous | 03/31/2003 | 1B |
| pH | = | | std units | self | continuous | 04/01/2003 | 1B |
| pH | = | | std units | self | continuous | 04/02/2003 | 1B |
| pH | = | | std units | self | continuous | 04/03/2003 | 1B |
| pH | = | | std units | self | continuous | 04/04/2003 | 1B |
| pH | = | | std units | self | continuous | 04/05/2003 | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 04/06/2003 | 1B |
| pH | = | | std units | self | continuous | 04/07/2003 | 1B |
| pH | = | | std units | self | continuous | 04/08/2003 | 1B |
| pH | = | | std units | self | continuous | 04/09/2003 | 1B |
| pH | = | | std units | self | continuous | 04/10/2003 | 1B |
| pH | = | | std units | self | continuous | 04/11/2003 | 1B |
| pH | = | | std units | self | continuous | 04/12/2003 | 1B |
| pH | = | | std units | self | continuous | 04/13/2003 | 1B |
| pH | = | | std units | self | continuous | 04/14/2003 | 1B |
| pH | = | | std units | self | continuous | 04/15/2003 | 1B |
| pH | = | | std units | self | continuous | 04/16/2003 | 1B |
| pH | = | | std units | self | continuous | 04/17/2003 | 1B |
| pH | = | | std units | self | continuous | 04/18/2003 | 1B |
| pH | = | | std units | self | continuous | 04/19/2003 | 1B |
| pH | = | | std units | self | continuous | 04/20/2003 | 1B |
| pH | = | | std units | self | continuous | 04/21/2003 | 1B |
| pH | = | | std units | self | continuous | 04/22/2003 | 1B |
| pH | = | | std units | self | continuous | 04/23/2003 | 1B |
| pH | = | | std units | self | continuous | 04/24/2003 | 1B |
| pH | = | | std units | self | continuous | 04/25/2003 | 1B |
| pH | = | | std units | self | continuous | 04/26/2003 | 1B |
| pH | = | | std units | self | continuous | 04/27/2003 | 1B |
| pH | = | | std units | self | continuous | 04/28/2003 | 1B |
| pH | = | | std units | self | continuous | 04/29/2003 | 1B |
| pH | = | | std units | self | continuous | 04/30/2003 | 1B |
| pH | = | | std units | self | continuous | 05/01/2003 | 1B |
| pH | = | | std units | self | continuous | 05/02/2003 | 1B |
| pH | = | | std units | self | continuous | 05/03/2003 | 1B |
| pH | = | | std units | self | continuous | 05/04/2003 | 1B |
| pH | = | | std units | self | continuous | 05/05/2003 | 1B |
| pH | = | 9.3 | std units | city | grab | 05/05/2003 10:00 AM | 1B |
| pH | = | | std units | self | continuous | 05/06/2003 | 1B |
| pH | = | | std units | self | continuous | 05/07/2003 | 1B |
| pH | = | | std units | self | continuous | 05/08/2003 | 1B |
| pH | = | | std units | self | continuous | 05/09/2003 | 1B |
| pH | = | | std units | self | continuous | 05/10/2003 | 1B |
| pH | = | | std units | self | continuous | 05/11/2003 | 1B |
| pH | = | | std units | self | continuous | 05/12/2003 | 1B |
| pH | = | | std units | self | continuous | 05/13/2003 | 1B |
| pH | = | | std units | self | continuous | 05/14/2003 | 1B |
| pH | = | | std units | self | continuous | 05/15/2003 | 1B |
| pH | = | | std units | self | continuous | 05/16/2003 | 1B |
| pH | = | | std units | self | continuous | 05/17/2003 | 1B |
| pH | = | | std units | self | continuous | 05/18/2003 | 1B |
| pH | = | | std units | self | continuous | 05/19/2003 | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 05/20/2003 | 1B |
| pH | = | | std units | self | continuous | 05/21/2003 | 1B |
| pH | = | | std units | self | continuous | 05/22/2003 | 1B |
| pH | = | | std units | self | continuous | 05/23/2003 | 1B |
| pH | = | | std units | self | continuous | 05/24/2003 | 1B |
| pH | = | | std units | self | continuous | 05/25/2003 | 1B |
| pH | = | | std units | self | continuous | 05/26/2003 | 1B |
| pH | = | | std units | self | continuous | 05/27/2003 | 1B |
| pH | = | | std units | self | continuous | 05/28/2003 | 1B |
| pH | = | | std units | self | continuous | 05/29/2003 | 1B |
| pH | = | | std units | self | continuous | 05/30/2003 | 1B |
| pH | = | | std units | self | continuous | 05/31/2003 | 1B |
| pH | = | | std units | self | continuous | 06/01/2003 | 1B |
| pH | = | | std units | self | continuous | 06/02/2003 | 1B |
| pH | = | | std units | self | continuous | 06/03/2003 | 1B |
| pH | = | | std units | self | continuous | 06/04/2003 | 1B |
| pH | = | | std units | self | continuous | 06/05/2003 | 1B |
| pH | = | | std units | self | continuous | 06/06/2003 | 1B |
| pH | = | | std units | self | continuous | 06/07/2003 | 1B |
| pH | = | | std units | self | continuous | 06/08/2003 | 1B |
| pH | = | | std units | self | continuous | 06/09/2003 | 1B |
| pH | = | | std units | self | continuous | 06/10/2003 | 1B |
| pH | = | | std units | self | continuous | 06/11/2003 | 1B |
| pH | = | | std units | self | continuous | 06/12/2003 | 1B |
| pH | = | | std units | self | continuous | 06/13/2003 | 1B |
| pH | = | | std units | self | continuous | 06/14/2003 | 1B |
| pH | = | | std units | self | continuous | 06/15/2003 | 1B |
| pH | = | | std units | self | continuous | 06/16/2003 | 1B |
| pH | = | | std units | self | continuous | 06/17/2003 | 1B |
| pH | = | | std units | self | continuous | 06/18/2003 | 1B |
| pH | = | | std units | self | continuous | 06/19/2003 | 1B |
| pH | = | | std units | self | continuous | 06/20/2003 | 1B |
| pH | = | | std units | self | continuous | 06/21/2003 | 1B |
| pH | = | | std units | self | continuous | 06/22/2003 | 1B |
| pH | = | | std units | self | continuous | 06/23/2003 | 1B |
| pH | = | | std units | self | continuous | 06/24/2003 | 1B |
| pH | = | | std units | self | continuous | 06/25/2003 | 1B |
| pH | = | | std units | self | continuous | 06/26/2003 | 1B |
| pH | = | | std units | self | continuous | 06/27/2003 | 1B |
| pH | = | | std units | self | continuous | 06/28/2003 | 1B |
| pH | = | | std units | self | continuous | 06/29/2003 | 1B |
| pH | = | | std units | self | continuous | 06/30/2003 | 1B |
| pH | = | | std units | self | continuous | 07/01/2003 | 1B |
| pH | = | | std units | self | continuous | 07/02/2003 | 1B |
| pH | = | | std units | self | continuous | 07/03/2003 | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 07/04/2003 | 1B |
| pH | = | | std units | self | continuous | 07/05/2003 | 1B |
| pH | = | | std units | self | continuous | 07/06/2003 | 1B |
| pH | = | | std units | self | continuous | 07/07/2003 | 1B |
| pH | = | | std units | self | continuous | 07/08/2003 | 1B |
| pH | = | | std units | self | continuous | 07/09/2003 | 1B |
| pH | = | | std units | self | continuous | 07/10/2003 | 1B |
| pH | = | | std units | self | continuous | 07/11/2003 | 1B |
| pH | = | | std units | self | continuous | 07/12/2003 | 1B |
| pH | = | | std units | self | continuous | 07/13/2003 | 1B |
| pH | = | | std units | self | continuous | 07/14/2003 | 1B |
| pH | = | | std units | self | continuous | 07/15/2003 | 1B |
| pH | = | | std units | self | continuous | 07/16/2003 | 1B |
| pH | = | | std units | self | continuous | 07/17/2003 | 1B |
| pH | = | | std units | self | continuous | 07/18/2003 | 1B |
| pH | = | | std units | self | continuous | 07/19/2003 | 1B |
| pH | = | | std units | self | continuous | 07/20/2003 | 1B |
| pH | = | | std units | self | continuous | 07/21/2003 | 1B |
| pH | = | | std units | self | continuous | 07/22/2003 | 1B |
| pH | = | | std units | self | continuous | 07/23/2003 | 1B |
| pH | = | | std units | self | continuous | 07/24/2003 | 1B |
| pH | = | | std units | self | continuous | 07/25/2003 | 1B |
| pH | = | | std units | self | continuous | 07/26/2003 | 1B |
| pH | = | | std units | self | continuous | 07/27/2003 | 1B |
| pH | = | | std units | self | continuous | 07/28/2003 | 1B |
| pH | = | | std units | self | continuous | 07/29/2003 | 1B |
| pH | = | | std units | self | continuous | 07/30/2003 | 1B |
| pH | = | | std units | self | continuous | 07/31/2003 | 1B |
| pH | = | | std units | self | continuous | 08/01/2003 | 1B |
| pH | = | | std units | self | continuous | 08/02/2003 | 1B |
| pH | = | | std units | self | continuous | 08/03/2003 | 1B |
| pH | = | | std units | self | continuous | 08/04/2003 | 1B |
| pH | = | 8.9 | std units | city | grab | 08/04/2003 12:54 PM | 1B |
| pH | = | | std units | self | continuous | 08/05/2003 | 1B |
| pH | = | | std units | self | continuous | 08/06/2003 | 1B |
| pH | = | | std units | self | continuous | 08/07/2003 | 1B |
| pH | = | | std units | self | continuous | 08/08/2003 | 1B |
| pH | = | | std units | self | continuous | 08/09/2003 | 1B |
| pH | = | | std units | self | continuous | 08/10/2003 | 1B |
| pH | = | | std units | self | continuous | 08/11/2003 | 1B |
| pH | = | | std units | self | continuous | 08/12/2003 | 1B |
| pH | = | | std units | self | continuous | 08/13/2003 | 1B |
| pH | = | | std units | self | continuous | 08/14/2003 | 1B |
| pH | = | | std units | self | continuous | 08/15/2003 | 1B |
| pH | = | | std units | self | continuous | 08/16/2003 | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 08/17/2003 | 1B |
| pH | = | | std units | self | continuous | 08/18/2003 | 1B |
| pH | = | | std units | self | continuous | 08/19/2003 | 1B |
| pH | = | | std units | self | continuous | 08/20/2003 | 1B |
| pH | = | | std units | self | continuous | 08/21/2003 | 1B |
| pH | = | | std units | self | continuous | 08/22/2003 | 1B |
| pH | = | | std units | self | continuous | 08/23/2003 | 1B |
| pH | = | | std units | self | continuous | 08/24/2003 | 1B |
| pH | = | | std units | self | continuous | 08/25/2003 | 1B |
| pH | = | | std units | self | continuous | 08/26/2003 | 1B |
| pH | = | | std units | self | continuous | 08/27/2003 | 1B |
| pH | = | | std units | self | continuous | 08/28/2003 | 1B |
| pH | = | | std units | self | continuous | 08/29/2003 | 1B |
| pH | = | | std units | self | continuous | 08/30/2003 | 1B |
| pH | = | | std units | self | continuous | 08/31/2003 | 1B |
| pH | = | | std units | self | continuous | 09/01/2003 | 1B |
| pH | = | | std units | self | continuous | 09/02/2003 | 1B |
| pH | = | | std units | self | continuous | 09/03/2003 | 1B |
| pH | = | | std units | self | continuous | 09/04/2003 | 1B |
| pH | = | | std units | self | continuous | 09/05/2003 | 1B |
| pH | = | | std units | self | continuous | 09/06/2003 | 1B |
| pH | = | | std units | self | continuous | 09/07/2003 | 1B |
| pH | = | | std units | self | continuous | 09/08/2003 | 1B |
| pH | = | | std units | self | continuous | 09/09/2003 | 1B |
| pH | = | | std units | self | continuous | 09/10/2003 | 1B |
| pH | = | | std units | self | continuous | 09/11/2003 | 1B |
| pH | = | | std units | self | continuous | 09/12/2003 | 1B |
| pH | = | | std units | self | continuous | 09/13/2003 | 1B |
| pH | = | | std units | self | continuous | 09/14/2003 | 1B |
| pH | = | | std units | self | continuous | 09/15/2003 | 1B |
| pH | = | | std units | self | continuous | 09/16/2003 | 1B |
| pH | = | | std units | self | continuous | 09/17/2003 | 1B |
| pH | = | | std units | self | continuous | 09/18/2003 | 1B |
| pH | = | | std units | self | continuous | 09/19/2003 | 1B |
| pH | = | | std units | self | continuous | 09/20/2003 | 1B |
| pH | = | | std units | self | continuous | 09/21/2003 | 1B |
| pH | = | | std units | self | continuous | 09/22/2003 | 1B |
| pH | = | | std units | self | continuous | 09/23/2003 | 1B |
| pH | = | | std units | self | continuous | 09/24/2003 | 1B |
| pH | = | | std units | self | continuous | 09/25/2003 | 1B |
| pH | = | | std units | self | continuous | 09/26/2003 | 1B |
| pH | = | | std units | self | continuous | 09/27/2003 | 1B |
| pH | = | | std units | self | continuous | 09/28/2003 | 1B |
| pH | = | | std units | self | continuous | 09/29/2003 | 1B |
| pH | = | | std units | self | continuous | 09/30/2003 | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 10/01/2003 | 1B |
| pH | = | | std units | self | continuous | 10/02/2003 | 1B |
| pH | = | | std units | self | continuous | 10/03/2003 | 1B |
| pH | = | | std units | self | continuous | 10/04/2003 | 1B |
| pH | = | | std units | self | continuous | 10/05/2003 | 1B |
| pH | = | | std units | self | continuous | 10/06/2003 | 1B |
| pH | = | | std units | self | continuous | 10/07/2003 | 1B |
| pH | = | | std units | self | continuous | 10/08/2003 | 1B |
| pH | = | | std units | self | continuous | 10/09/2003 | 1B |
| pH | = | | std units | self | continuous | 10/10/2003 | 1B |
| pH | = | | std units | self | continuous | 10/11/2003 | 1B |
| pH | = | | std units | self | continuous | 10/12/2003 | 1B |
| pH | = | | std units | self | continuous | 10/13/2003 | 1B |
| pH | = | | std units | self | continuous | 10/14/2003 | 1B |
| pH | = | | std units | self | continuous | 10/15/2003 | 1B |
| pH | = | | std units | self | continuous | 10/16/2003 | 1B |
| pH | = | 9.9 | std units | city | grab | 10/16/2003 9:54 AM | 1B |
| pH | = | | std units | self | continuous | 10/17/2003 | 1B |
| pH | = | | std units | self | continuous | 10/18/2003 | 1B |
| pH | = | | std units | self | continuous | 10/19/2003 | 1B |
| pH | = | | std units | self | continuous | 10/20/2003 | 1B |
| pH | = | | std units | self | continuous | 10/21/2003 | 1B |
| pH | = | | std units | self | continuous | 10/22/2003 | 1B |
| pH | = | | std units | self | continuous | 10/23/2003 | 1B |
| pH | = | | std units | self | continuous | 10/24/2003 | 1B |
| pH | = | | std units | self | continuous | 10/25/2003 | 1B |
| pH | = | | std units | self | continuous | 10/26/2003 | 1B |
| pH | = | | std units | self | continuous | 10/27/2003 | 1B |
| pH | = | | std units | self | continuous | 10/28/2003 | 1B |
| pH | = | | std units | self | continuous | 10/29/2003 | 1B |
| pH | = | | std units | self | continuous | 10/30/2003 | 1B |
| pH | = | | std units | self | continuous | 10/31/2003 | 1B |
| pH | = | | std units | self | continuous | 11/01/2003 | 1B |
| pH | = | | std units | self | continuous | 11/02/2003 | 1B |
| pH | = | | std units | self | continuous | 11/03/2003 | 1B |
| pH | = | | std units | self | continuous | 11/04/2003 | 1B |
| pH | = | | std units | self | continuous | 11/05/2003 | 1B |
| pH | = | | std units | self | continuous | 11/06/2003 | 1B |
| pH | = | | std units | self | continuous | 11/07/2003 | 1B |
| pH | = | | std units | self | continuous | 11/08/2003 | 1B |
| pH | = | | std units | self | continuous | 11/09/2003 | 1B |
| pH | = | | std units | self | continuous | 11/10/2003 | 1B |
| pH | = | | std units | self | continuous | 11/11/2003 | 1B |
| pH | = | | std units | self | continuous | 11/12/2003 | 1B |
| pH | = | | std units | self | continuous | 11/13/2003 | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 11/14/2003 | 1B |
| pH | = | | std units | self | continuous | 11/15/2003 | 1B |
| pH | = | | std units | self | continuous | 11/16/2003 | 1B |
| pH | = | | std units | self | continuous | 11/17/2003 | 1B |
| pH | = | | std units | self | continuous | 11/18/2003 | 1B |
| pH | = | | std units | self | continuous | 11/19/2003 | 1B |
| pH | = | | std units | self | continuous | 11/20/2003 | 1B |
| pH | = | | std units | self | continuous | 11/21/2003 | 1B |
| pH | = | | std units | self | continuous | 11/22/2003 | 1B |
| pH | = | | std units | self | continuous | 11/23/2003 | 1B |
| pH | = | | std units | self | continuous | 11/24/2003 | 1B |
| pH | = | | std units | self | continuous | 11/25/2003 | 1B |
| pH | = | | std units | self | continuous | 11/26/2003 | 1B |
| pH | = | | std units | self | continuous | 11/27/2003 | 1B |
| pH | = | | std units | self | continuous | 11/28/2003 | 1B |
| pH | = | | std units | self | continuous | 11/29/2003 | 1B |
| pH | = | | std units | self | continuous | 11/30/2003 | 1B |
| pH | = | | std units | self | continuous | 12/01/2003 | 1B |
| pH | = | | std units | self | continuous | 12/02/2003 | 1B |
| pH | = | | std units | self | continuous | 12/03/2003 | 1B |
| pH | = | | std units | self | continuous | 12/04/2003 | 1B |
| pH | = | | std units | self | continuous | 12/05/2003 | 1B |
| pH | = | | std units | self | continuous | 12/06/2003 | 1B |
| pH | = | | std units | self | continuous | 12/07/2003 | 1B |
| pH | = | | std units | self | continuous | 12/08/2003 | 1B |
| pH | = | | std units | self | continuous | 12/09/2003 | 1B |
| pH | = | | std units | self | continuous | 12/10/2003 | 1B |
| pH | = | | std units | self | continuous | 12/11/2003 | 1B |
| pH | = | | std units | self | continuous | 12/12/2003 | 1B |
| pH | = | | std units | self | continuous | 12/13/2003 | 1B |
| pH | = | | std units | self | continuous | 12/14/2003 | 1B |
| pH | = | | std units | self | continuous | 12/15/2003 | 1B |
| pH | = | | std units | self | continuous | 12/16/2003 | 1B |
| pH | = | | std units | self | continuous | 12/17/2003 | 1B |
| pH | = | | std units | self | continuous | 12/18/2003 | 1B |
| pH | = | | std units | self | continuous | 12/19/2003 | 1B |
| pH | = | | std units | self | continuous | 12/20/2003 | 1B |
| pH | = | | std units | self | continuous | 12/21/2003 | 1B |
| pH | = | | std units | self | continuous | 12/22/2003 | 1B |
| pH | = | | std units | self | continuous | 12/23/2003 | 1B |
| pH | = | | std units | self | continuous | 12/24/2003 | 1B |
| pH | = | | std units | self | continuous | 12/25/2003 | 1B |
| pH | = | | std units | self | continuous | 12/26/2003 | 1B |
| pH | = | | std units | self | continuous | 12/27/2003 | 1B |
| pH | = | | std units | self | continuous | 12/28/2003 | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 12/29/2003 | 1B |
| pH | = | | std units | self | continuous | 12/30/2003 | 1B |
| pH | = | | std units | self | continuous | 12/31/2003 | 1B |
| **pH** | | | **Minimum** | **8.9000 std units** | | **Count 369** | |
| | | | **Maximum** | **9.9000 std units** | | | |
| phenanthrene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| phenanthrene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **phenanthrene** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| phenols - total (epa 420) | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| phenols - total (epa 420) | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **phenols - total (epa 420)** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| pyrene | < | 0.005 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| pyrene | < | 0.005 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **pyrene** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| sec-butylbenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| sec-butylbenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| sec-butylbenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| sec-butylbenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **sec-butylbenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| selenium | < | 0.01 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| **selenium** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| silver | < | 0.02 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| **silver** | | | **Minimum** | **0.0100 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0100 mg/L** | | | |
| | | | **Maximum** | **0.0100 mg/L** | | | |
| solids - total | = | 265 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| solids - total | = | 441 | mg/L | city | composite | 05/05/2003 10:00 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| solids - total | = | 484 | mg/L | city | composite | 08/04/2003 12:57 PM | 1B |
| solids - total | = | 415 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **solids - total** | | **Minimum** | | **265.0000 mg/L** | | **Count 4** | |
| | | **Average** | | **401.2500 mg/L** | | | |
| | | **Maximum** | | **484.0000 mg/L** | | | |
| solids - total dissolved | = | 210 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| solids - total dissolved | = | 340 | mg/L | city | composite | 05/05/2003 10:00 AM | 1B |
| solids - total dissolved | = | 330 | mg/L | city | composite | 08/04/2003 12:57 PM | 1B |
| solids - total dissolved | = | 360 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| **solids - total dissolved** | | **Minimum** | | **210.0000 mg/L** | | **Count 4** | |
| | | **Average** | | **310.0000 mg/L** | | | |
| | | **Maximum** | | **360.0000 mg/L** | | | |
| solids - total suspended | = | 57 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| solids - total suspended | = | 69.5 | mg/L | self | grab | 03/06/2003 10:00 AM | 1B |
| solids - total suspended | = | 36.5 | mg/L | self | grab | 03/13/2003 11:50 AM | 1B |
| solids - total suspended | = | 142.5 | mg/L | self | grab | 03/20/2003 11:40 AM | 1B |
| solids - total suspended | = | 68 | mg/L | self | grab | 03/27/2003 11:30 AM | 1B |
| solids - total suspended | = | 96 | mg/L | city | composite | 05/05/2003 10:00 AM | 1B |
| solids - total suspended | = | 47.5 | mg/L | self | composite | 06/05/2003 9:30 AM | 1B |
| solids - total suspended | = | 150 | mg/L | city | composite | 08/04/2003 12:57 PM | 1B |
| solids - total suspended | = | 398 | mg/L | self | composite | 09/04/2003 7:40 AM | 1B |
| solids - total suspended | = | 17.5 | mg/L | self | composite | 09/05/2003 7:30 AM | 1B |
| solids - total suspended | = | 113 | mg/L | self | composite | 09/11/2003 11:20 AM | 1B |
| solids - total suspended | = | 93 | mg/L | self | composite | 09/18/2003 11:30 AM | 1B |
| solids - total suspended | = | 50 | mg/L | self | composite | 09/25/2003 11:35 AM | 1B |
| solids - total suspended | = | 50 | mg/L | city | composite | 10/16/2003 9:56 AM | 1B |
| solids - total suspended | = | 58.5 | mg/L | self | composite | 12/04/2003 7:45 AM | 1B |
| solids - total suspended | = | 19 | mg/L | self | composite | 12/11/2003 | 1B |
| solids - total suspended | = | 17 | mg/L | self | composite | 12/23/2003 | 1B |
| **solids - total suspended** | | **Minimum** | | **17.0000 mg/L** | | **Count 17** | |
| | | **Average** | | **87.2353 mg/L** | | | |
| | | **Maximum** | | **398.0000 mg/L** | | | |
| styrene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| styrene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| styrene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| styrene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **styrene** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| tert-butylbenzene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| tert-butylbenzene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| tert-butylbenzene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| tert-butylbenzene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **tert-butylbenzene** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| tetrachloroethene | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| tetrachloroethene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| tetrachloroethene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| tetrachloroethene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| tetrachloroethene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| tetrachloroethene | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **tetrachloroethene** | | **Minimum** | | **0.0010 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0037 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| toluene | < | 0.002 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| toluene | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| toluene | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| toluene | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| toluene | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| toluene | < | 0.002 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **toluene** | | **Minimum** | | **0.0010 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0037 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| trichloroethene (tce) | < | 0.003 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| trichloroethene (tce) | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| trichloroethene (tce) | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| trichloroethene (tce) | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| trichloroethene (tce) | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| trichloroethene (tce) | < | 0.003 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **trichloroethene (tce)** | | **Minimum** | | **0.0015 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0038 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| trichlorofluoromethane (freon-11) | < | 0.005 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| trichlorofluoromethane (freon-11) | < | 0.005 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **trichlorofluoromethane (freon-11)** | | | **Minimum** | **0.0025 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0042 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| vinyl acetate | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| vinyl acetate | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| vinyl acetate | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| vinyl acetate | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **vinyl acetate** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| vinyl chloride | < | 0.01 | mg/L | city | grab | 01/14/2003 9:30 AM | 1B |
| vinyl chloride | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| vinyl chloride | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| vinyl chloride | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| vinyl chloride | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| vinyl chloride | < | 0.01 | mg/L | city | grab | 12/04/2003 2:23 PM | 1B |
| **vinyl chloride** | | | **Minimum** | **0.0050 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| xylene, m- | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| xylene, m- | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| xylene, m- | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| xylene, m- | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **xylene, m-** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| xylene, o- | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| xylene, o- | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| xylene, o- | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| xylene, o- | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **xylene, o-** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| xylene, p- | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| xylene, p- | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| xylene, p- | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |

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Org Id **1592**

Org Name **SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| xylene, p- | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **xylene, p-** | | | **Minimum** | | **0.0050 mg/L** | **Count 4** | |
| | | | **Average** | | **0.0050 mg/L** | | |
| | | | **Maximum** | | **0.0050 mg/L** | | |
| xylenes, total | < | 0.01 | mg/L | self | grab | 03/06/2003 6:30 AM | 1B |
| xylenes, total | < | 0.01 | mg/L | self | grab | 06/05/2003 9:30 AM | 1B |
| xylenes, total | < | 0.01 | mg/L | self | grab | 09/04/2003 7:40 AM | 1B |
| xylenes, total | < | 0.01 | mg/L | self | grab | 12/04/2003 7:45 AM | 1B |
| **xylenes, total** | | | **Minimum** | | **0.0050 mg/L** | **Count 4** | |
| | | | **Average** | | **0.0050 mg/L** | | |
| | | | **Maximum** | | **0.0050 mg/L** | | |
| zinc | < | 0.05 | mg/L | city | composite | 01/14/2003 9:32 AM | 1B |
| **zinc** | | | **Minimum** | | **0.0250 mg/L** | **Count 1** | |
| | | | **Average** | | **0.0250 mg/L** | | |
| | | | **Maximum** | | **0.0250 mg/L** | | |

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## Bull Run Source

These samples are taken of water before treatment.

**Microbiological Contaminants** are tiny living organisms such as bacteria and parasites.

| Microbiological Contaminants | Past 12 months | MRL | December 2002 | EPA Standard |
|---|---|---|---|---|
| ***Primary Contaminants*** | | | | |
| Total Coliform Bacteria colonies/100mL | 100% below 100/100mL | 1 | 100% below 100/100mL in previous 6 months | 90% below 100/100mL over previous 6 months |
| Fecal Coliform Bacteria colonies/100mL | 100% below 20/100mL | 1 | 100% below 20/100mL in previous 6 months | 90% below 20/100mL over previous 6 months |
| *Giardia lamblia* cysts/100L | <1 – 9.5 | 1 | 2 | Treatment Technique |
| ***Unregulated Contaminants*** | | | | |
| *Cryptosporidium* oocysts/100L | <1 – 2.4 | 1 | <2 | Not Regulated |

**Turbidity**, a measure of light scatter indicating the presence of particles in the water, is considered a primary contaminant because these particles can interfere with disinfection.

| Physical Characteristics | Past 12 Months | MRL | December 2002 | EPA Standard |
|---|---|---|---|---|
| Turbidity (NTU) | 0.24 – 2.21 | | 0.44-1.46 | 5 |

## Treated Water

The treated water samples were collected at the outlet of the Lusted Hill Treatment Facility on December 4, 2002.

**Results reported as parts per million unless otherwise noted.**

**Physical characteristics** include temperature, pH specific conductance, color, and solids. These characteristics themselves pose no health risk.

| Physical Characteristics | Past 12 Months Range | MRL | December 4, 2002 | EPA Standard |
|---|---|---|---|---|
| ***Secondary Contaminants*** | | | | SMCL |
| pH (Standard units) | 6.9 – 7.8 | ---- | 7.5 | 6.5 - 8.5 |
| Total Dissolved Solids | 20-31 | 0.1 | 31 | 500 |
| Color (Standard Units) | <5 – 15 | 5 | 15 | 15 |
| ***Unregulated Characteristics*** | | | | |
| Specific Conductance (µmhos/cm @25°C) | 21-38 | 0.1 | 36 | Not Regulated |
| Water temperature (°C) | 4.6 – 17 | 0.1 | 8.7 | Not Regulated |
| Suspended Solids | 0.5-1.5 | 0.5 | 1.0 | Not Regulated |
| Total Solids (@180 °C) | 20-32 | 0.1 | 32 | Not Regulated |

**Nutrients** are chemicals which plants and bacteria need to grow. All results reported as parts per million.

| Nutrients | Past 12 Months Range | MRL | December 4, 2002 | EPA Standard |
|---|---|---|---|---|
| ***Primary Contaminants*** | | | | MCL |
| Nitrate Nitrogen ($NO_3$-N) | 0.01 – 0.05 | 0.01 | 0.05 | 10 |
| Nitrite Nitrogen ($NO_2$-N) | <0.005 | 0.005 | <0.005 | 1 |
| ***Unregulated Contaminants*** | | | | |
| Ammonia Nitrogen($NH_3$-N) | 0.28 – 0.38 | 0.020 | 0.33 | Not Regulated |
| Nitrogen, Organic (N) | 0.03 – 0.24 | 0.01 | 0.04 | Not Regulated |
| Phosphorus- Reactive ($PO_4$-P) | ND – 0.005 | 0.003 | <0.020 | Not Regulated |
| Phosphorus, Total (P) | <0.005 | 0.005 | <0.005 | Not Regulated |
| Silica ($SiO_2$ as Si) | 4.0 - 4.9 | 1.0 | 4.9 | Not Regulated |
| Total Organic Carbon (TOC as C) | 1.1 – 1.6 | 0.05 | 1.6 | Not Regulated |

Jim - 7/14/03
For your REF.
Tom

City of Portland Bureau of Water Works

# Triannual Water Quality Analysis

## December 2002

## Bull Run Water

The City of Portland, Bureau of Water Works supplies water to approximately 840,000 people in the Portland metropolitan area. The primary source is water drawn from two reservoirs in the protected Bull Run watershed 35 miles east of Portland. The water from Bull Run is very low in dissolved minerals and meets or is better than all water quality standards

## Groundwater Supply

The Portland system has a groundwater supply, which comes from 27 wells located near the south shore of the Columbia River. Groundwater is primarily used to supplement summer supply or provide extra water in an emergency. The Water Bureau last used groundwater from October 8 to October 19, 2001 to supplement summer supply

## Water Treatment

Water is first disinfected with chlorine (at about 2 parts per million). At the end of the disinfection process, sodium hydroxide (NaOH) and ammonium hydroxide ($NH_4OH$) are added to the water. Sodium hydroxide (at a dose of 2.5 to 3.5 ppm) is added to raise the pH slightly (approximately 1 pH unit). This helps prevent corrosion of household plumbing and lowers the levels of lead and copper that can leach into the water. Ammonium hydroxide is added (at a dose of about 0.35 ppm as $NH_3$-N) to form a long-lasting chloramine disinfectant residual.

## Water Quality Standards

The U.S. Environmental Protection Agency (EPA) and the Oregon Health Division set water quality standards.

Primary standards are set by regulation to protect public health and are usually maximum contaminant levels (MCL). Lead and copper standards are primary standards that are action levels. Action levels, when exceeded at selected consumers' taps, trigger requirements that water providers take steps to reduce corrosion and to provide public education.

Secondary standards are guidelines set to assure good aesthetic quality and are secondary maximum contaminant levels (SMCL) Secondary standards identify levels of substances that may affect taste, odor or color of water, may stain sinks and bathtubs, or may interfere with treatment processes.

## Water Supply

Bull Run reservoirs are full. Through the end of December, we had 64% of normal Water Year precipitation at Headworks, which puts us at the 8th percentile of historical record. It is too early to make any predictions about summer supply, since the timing of spring rainfall will be the most important factor.

## About the Report

This report presents tables of current analysis results for Portland's Bull Run water to users needing technical data. Six key parameters marked with a 🔑 are graphed to show annual trends. Additional background information is available in the 2002 Water Quality Report, which is mailed to Portland postal customers beginning in June.

Most substances listed are reported in units of concentration, parts per million. One part per million is approximately equivalent to a drop of water in 12 gallons. When other units are used, they are shown adjacent to the name of the substance.

This report is using a slightly different reporting format. Substances not present or present in levels below the reporting limits of the prescribed method are now shown with a < (less than ) in the result column. The value shown next to the "<" is the method reporting limit, the lowest quantity that can be reliably reported for the test method. Details are explained on page 4 under "New Laboratory Accreditation".

**Abbreviations:**

| | |
|---|---|
| < | Less than |
| MCL | Maximum Contaminant Level |
| MRL | Method Reporting Limit |
| SMCL | Secondary Maximum Contaminant Level |
| ppm | Parts Per Million (equivalent to mg/L) |



SCOEPA00035946

## Treated Water (cont.)

**Anions and cations** are negative and positive ions. Water is an excellent solvent. When water flows over soil and rocks, major constituents dissolve in water where they form anions and cations. Bull Run water has low levels of these anions and cations. **All results reported as parts per million.**

| Anions and Cations | Past 12 Months Range | MRL | December 4, 2002 | EPA Standard |
|---|---|---|---|---|
| ***Primary Contaminant*** | | | | **MCL** |
| Fluoride (F) | <0.05 | 0.05 | <0.05 | 4.0 |
| ***Secondary Contaminants*** | | | | **SMCL** |
| Chloride (Cl) | 1.7 – 2.1 | 0.5 | 2.1 | 250 |
| Fluoride (F) | <0.05 | 0.05 | <0.05 | 2.0 |
| Hardness (as $CaCO_3$) | 7.1 -11 | 0.1 | 11 | 250 |
| Sulfate ($SO_4$) | <0.5 | 0.5 | <0.5 | 250 |
| ***Unregulated Contaminants*** | | | | |
| Alkalinity (as $CaCO_3$) | 6.3 – 14 | 0.5 | 13 | Not Regulated |
| Hydroxide (as $CaCO_3$) | <0.1 | 0.1 | <0.1 | Not Regulated |
| Carbonate (as $CaCO_3$) | <0.1 | 0.1 | <0.1 | Not Regulated |
| Bicarbonate (as $CaCO_3$) | 7.9 - 13 | 0.1 | 13 | Not Regulated |
| Carbon Dioxide, Free ($CO_2$) | 0.6 – 0.8 | 0.1 | 0.8 | Not Regulated |
| Carbon Dioxide, Total ($CO_2$) | 7.6 -12 | 0.1 | 12 | Not Regulated |
| Calcium (Ca) | 1.4 – 2.5 | 0.01 | 2.5 | Not Regulated |
| Magnesium (Mg) | 0.59 - 1.1 | 0.01 | 1.1 | Not Regulated |
| Potassium (K) | 0.19 – 0.37 | 0.01 | 0.37 | Not Regulated |
| Sodium (Na) | 2.3 – 4.0 | 0.01 | 3.6 | Not Regulated |

**Metals** are a group of similar elements that occur in the earth's crust. Many are toxic at low levels and are considered primary contaminants by EPA. Other metals, such as iron, are not toxic, but can cause nuisance effects, such as discolored water. These are considered secondary contaminants. **All results reported as parts per million.**

| Metals | Past 12 Months Range | MRL | December 4, 2002 | EPA Standard |
|---|---|---|---|---|
| ***Primary Contaminants*** | | | | **MCL** |
| Antimony (Sb) | <0.003 | 0.003 | <0.003 | 0.006 |
| Arsenic (As) | <0.001 | 0.001 | <0.001 | 0.05 |
| Barium (Ba) | <0.002 – 0.002 | 0.002 | <0.002 | 2 |
| Cadmium (Cd) | <0.001 | 0.001 | <0.001 | 0.005 |
| Chromium (Cr) | <0.001 | 0.001 | <0.001 | 0.1 |
| Copper (Cu) | ND – 0.02 | 0.010 | <0.01 | Treatment Technique |
| Lead (Pb) | <0.001 | 0.001 | <0.001 | Treatment Technique |
| Mercury (Hg) | <0.001 | 0.001 | <0.001 | 0.002 |
| Selenium (Se) | <0.001 | 0.001 | <0.001 | 0.05 |
| ***Secondary Contaminants*** | | | | **SMCL** |
| Aluminum (Al) | 0.03 – 0.04 | 0.001 | 0.03 | 0.05 - 0.20 |
| Iron (Fe) | ND – 0.15 | 0.001 | 0.15 | 0.3 |
| Manganese (Mn) | ND – 0.024 | 0.010 | 0.02 | 0.05 |
| Silver (Ag) | <0.001 | 0.001 | <0.001 | 0.1 |
| Zinc (Zn) | <0.02 | 0.02 | <0.02 | 5 |
| ***Unregulated Contaminants*** | | | | |
| Nickel (Ni) | <0.002 | 0.002 | <0.002 | Not Regulated |

## Distribution System

These samples are taken from a network of sampling stations located throughout the areas served by the City of Portland. Other water providers using Bull Run water sample within their systems.

| Substance | Past 12 Months Range | MRL | December 2002 | EPA Standard |
|---|---|---|---|---|
| ***Primary Contaminant*** | | | | **MCL** |
| Total Coliform Bacteria (% of monthly samples where bacteria detected) | 0% to 0.35% | 0.2% | 0% positive | No more than 5% positive per month |
| ***Disinfection*** | | | | |
| Chlorine Residual detection | 0.03 % below detection | 0.1 | Zero % below detection | No more than 5% below detection per month for any consecutive 2 months |
| Chlorine residual measured in ppm | 0.0 – 1.9 ppm | 0.1 | 0.2 to 1.8 ppm | |

**Disinfection by-products** form when chlorine reacts with naturally occurring organic matter. Results shown are the average of 4 sites in Portland's distribution system.

| Disinfection by-products | Past 12 Months Range | MRL | November 13, 2002 | EPA Standard |
|---|---|---|---|---|
| ***Primary Contaminant*** | | | | **MCL** |
| Total Trihalomethanes ppm | 0.010 - 0.026 | 0.0005 | 0.015 | 0.080 |
| ***Unregulated Contaminants*** | | | | |
| Haloacetic Acids ppm | 0.015-0.035 | 0.0005 | 0.015 | 0.060 |

## Home Taps

These lead and copper results are from over 100 homes which because of their age and pipe materials are most likely to have elevated lead levels. The homes are located throughout the Bull Run service area. The EPA specifies the selection of homes and requires reporting the 90$^{th}$ percentile value for lead and copper. The 90$^{th}$ percentile is the value that 90 percent of the homes are at or below.

| ***Primary Contaminants*** | Detection Limit | Home Sampling: 90$^{th}$ percentile (October 2002) | EPA Standard Action Level |
|---|---|---|---|
| Copper, ppm | 0.001 | 0.50 | 1.3 |
| Lead, ppm | 0.001 | 0.017 | 0.015 |

## New Laboratory Accreditation

In the past, drinking water laboratories were certified by the Environmental Protection Agency (EPA), with many states administering programs that were overseen by the EPA. Certification standards varied somewhat from state to state, and only drinking water laboratories were certified. Labs are now accredited under the National Environmental Laboratory Accreditation Program (NELAP), which is mandatory for drinking water labs, and voluntary for other types of environmental labs. Since 2001, the Oregon Environmental Laboratory Accreditation Program (ORELAP) has served as the accreditation authority in Oregon. The Portland Water Bureau Laboratory was one of the first labs in the state to be accredited under the new program. The Portland Water Bureau Lab Manager is Chair of the ORELAP Technical Advisory Committee, which is working with the state to improve the implementation of ORELAP.

Laboratory reports look a bit different than they did in the past under new ORELAP requirements. In the past we reported the method detection limit (MDL) for a contaminant. MDLs are the lowest levels of contaminants that can be detected, and MDLs are still used by labs for internal quality assurance purposes. ORELAP standards require use of the Method Reporting Limit (MRL). The MRL is required to be set higher than the MDL, and represents the lowest level that the lab can reliably report over time for that analytical method

# Annual Trends in Key Parameters

January 1, 2002 to December 31, 2002

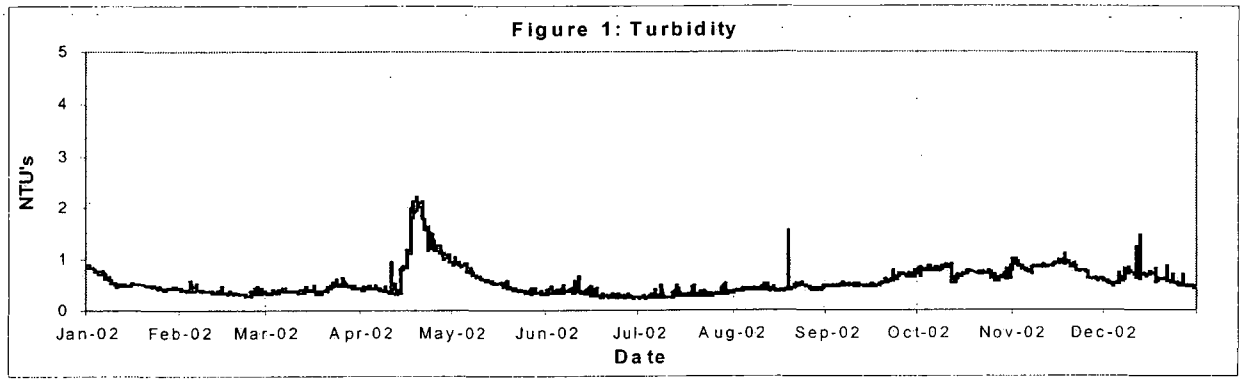


**Figure 1**. Turbidity is a measure of the light scatter indicating the presence of particles in the water and is measured in nephelometric turbidity units (NTUs). This graph shows the turbidity of the Bull Run source water before treatment. For unfiltered systems, the Maximum Contaminant Level for Turbidity is 5 NTU.

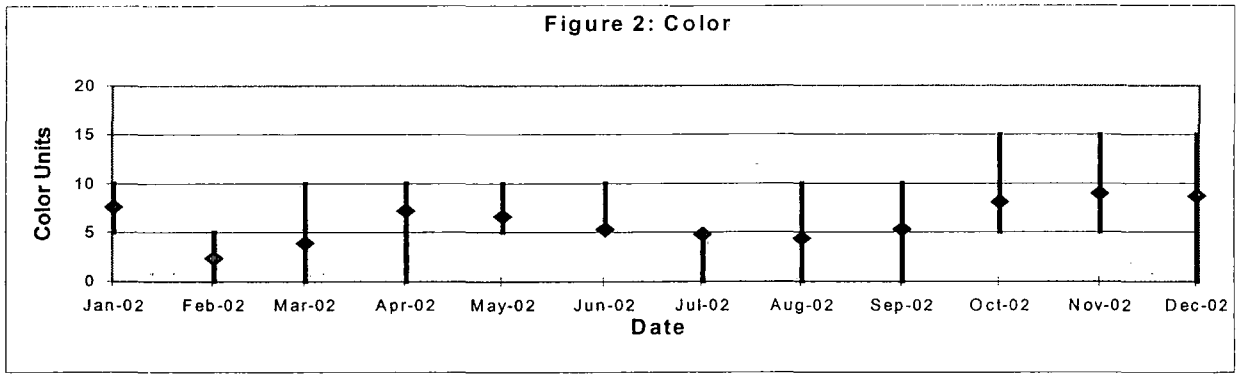


**Figure 2**. Color, measured in color units is the apparent color of the water due to substances dissolved or suspended in the water. It is measured by comparing the water with a sample of measured color. Color may result from the presence of plant by-products or sediment or dissolved metals (such as iron). The average, minimum, and maximum for each month are shown.

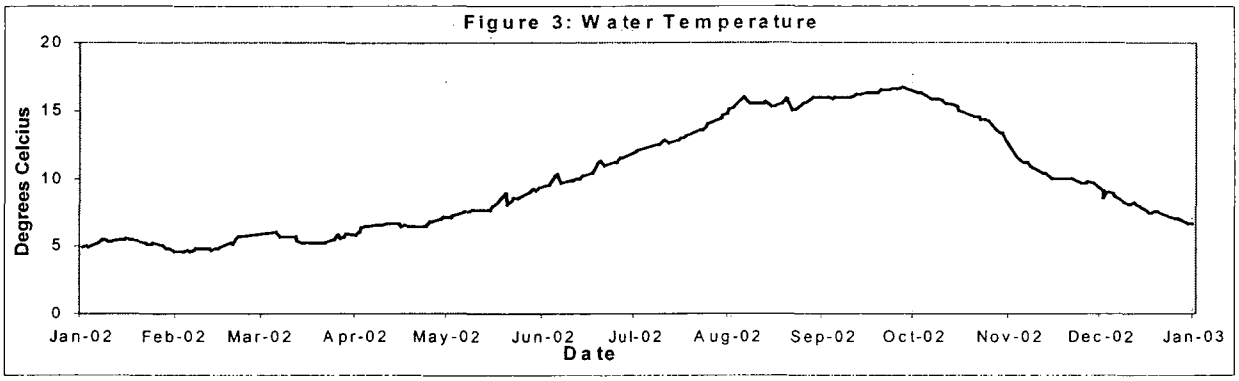


**Figure 3**. Water temperature varies throughout the year and is highest in late summer. As the water flows through the water distribution system, the temperature will rise.

# Annual Trends in Key Parameters (cont.)

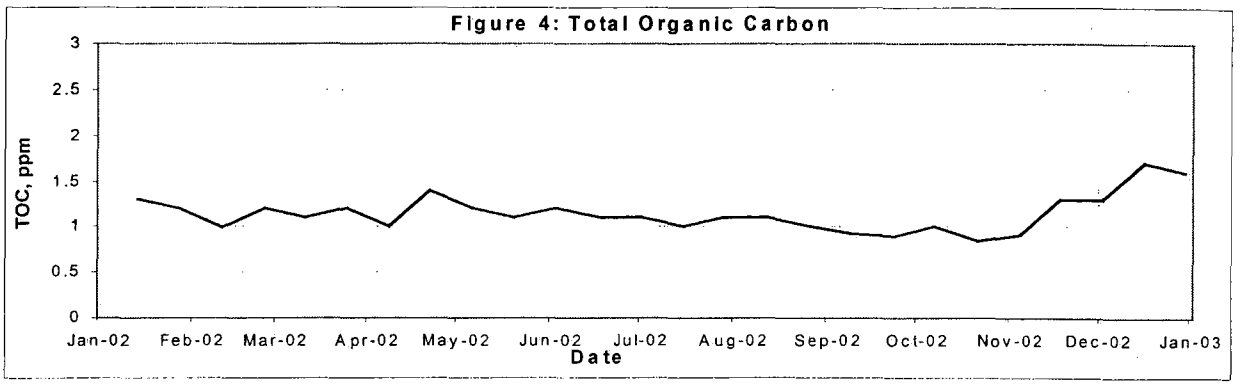


**Figure 4**. Total Organic Carbon (TOC) is a measure of carbon from organisms once living. TOC is very low in Bull Run water. The peak values occur in late fall and early winter, when leaves drop and rain washes organic material into the water. **Source water before treatment results shown here differ slightly from tabled results.**

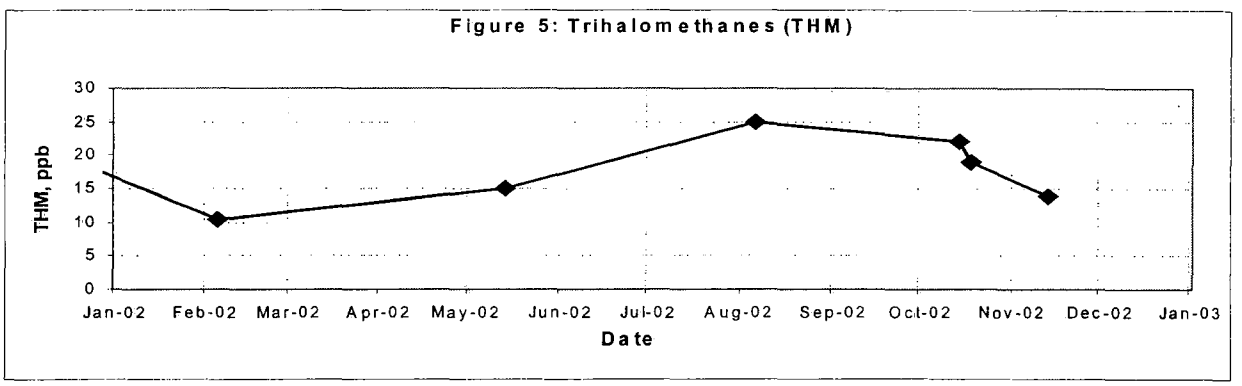


**Figure 5**. Trihalomethanes (THMs) are by-products of disinfection. THMs are formed when chlorine reacts with naturally occurring organic matter. THMs are typically highest in late fall and early winter, when leaves drop and rain washes organic material into the water. The results shown are the average for four locations in the distribution system. The current EPA maximum contaminant level is 80 parts per billion for total trihalomethanes

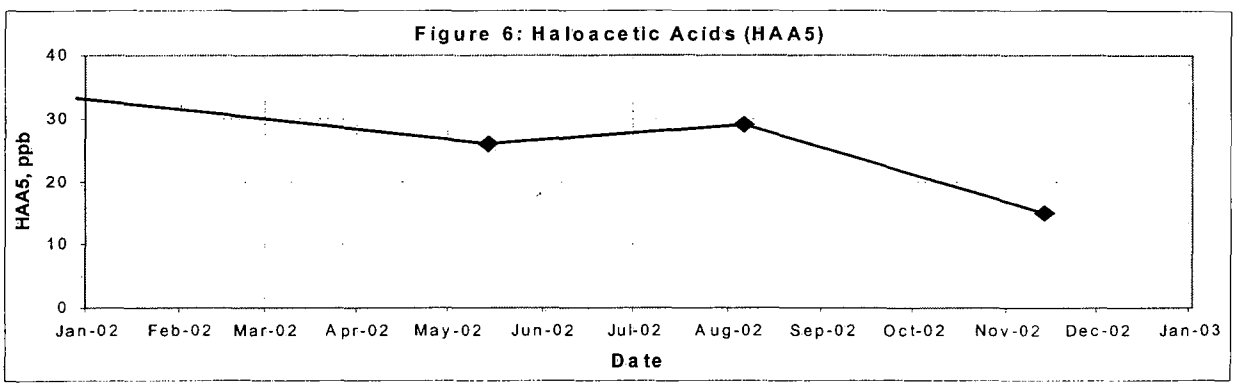


**Figure 6**. Haloacetic Acids (HAA) are by-products of disinfection and are formed in a similar manner to trihalomethanes. The results shown are the average of four locations in the distribution system. The EPA Maximum Contaminant Level for Haloacetic Acids is 60 parts per billion.

CITY OF PORTLAND
ENVIRONMENTAL SERVICES

Water Pollution Control Laboratory
6543 N. Burlington Ave., Portland, Oregon 97203-5452
(503) 823-5600

March 11, 2003

Mr. James Claxton
Wacker Siltronic Corporation
7200 NW Front Avenue
Mail Stop 30
Portland, OR 97283-0180

RE: 2002 Analytical Data.

Dear Mr. Claxton;

Enclosed is the sampling data collected from your facility during 2002. Use this data to assist you in maintaining historical information for pollutants present in your facility's wastewater discharge. This information will also help to identify any compliance issues.

The Industrial Source Control Division maintains data from both City and self-monitoring. Please take this opportunity to compare self-monitoring results to City monitoring results, as well as to verify the analytical information contained within the report with your records.

As always if you have any questions about this report or your facility's wastewater discharge permit, contact me at (503) 823-5537. We thank you for doing your part to help protect water quality and the environment.

Respectfully,

Timothy P. Dean
PPS/BES Permit Manager.

# Historical Analytical Report for 01/01/2002 - 01/01/2003

Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **1200Z**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| copper | = | 0.07 | mg/L | self | grab | 05/13/2002 1:45 PM | 01 |
| copper | = | 0.05 | mg/L | self | grab | 05/13/2002 2:00 PM | 02 |
| copper | < | 0.03 | mg/L | self | grab | 05/13/2002 2:15 PM | 03 |
| **copper** | | | **Minimum** | **0.0150 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0450 mg/L** | | | |
| | | | **Maximum** | **0.0700 mg/L** | | | |
| lead | = | 0.005 | mg/L | self | grab | 05/13/2002 1:45 PM | 01 |
| lead | = | 0.005 | mg/L | self | grab | 05/13/2002 2:00 PM | 02 |
| lead | < | 0.005 | mg/L | self | grab | 05/13/2002 2:15 PM | 03 |
| **lead** | | | **Minimum** | **0.0025 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0042 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| oil/grease - total | < | 3 | mg/L | self | grab | 05/13/2002 1:45 PM | 01 |
| oil/grease - total | < | 3 | mg/L | self | grab | 05/13/2002 2:00 PM | 02 |
| oil/grease - total | < | 3 | mg/L | self | grab | 05/13/2002 2:15 PM | 03 |
| **oil/grease - total** | | | **Minimum** | **1.5000 mg/L** | | **Count 3** | |
| | | | **Average** | **1.5000 mg/L** | | | |
| | | | **Maximum** | **1.5000 mg/L** | | | |
| pH | = | 6.12 | std units | self | grab | 05/13/2002 1:45 PM | 01 |
| pH | = | 6.3 | std units | self | grab | 05/13/2002 2:00 PM | 02 |
| pH | = | 6.42 | std units | self | grab | 05/13/2002 2:15 PM | 03 |
| **pH** | | | **Minimum** | **6.1200 std units** | | **Count 3** | |
| | | | **Maximum** | **6.4200 std units** | | | |
| solids - total suspended | = | 29.25 | mg/L | self | grab | 05/13/2002 1:45 PM | 01 |
| solids - total suspended | = | 32.5 | mg/L | self | grab | 05/13/2002 2:00 PM | 02 |
| solids - total suspended | = | 14.5 | mg/L | self | grab | 05/13/2002 2:15 PM | 03 |
| **solids - total suspended** | | | **Minimum** | **14.5000 mg/L** | | **Count 3** | |
| | | | **Average** | **25.4167 mg/L** | | | |
| | | | **Maximum** | **32.5000 mg/L** | | | |
| zinc | = | 0.48 | mg/L | self | grab | 05/13/2002 1:45 PM | 01 |
| zinc | = | 0.49 | mg/L | self | grab | 05/13/2002 2:00 PM | 02 |
| zinc | = | 0.31 | mg/L | self | grab | 05/13/2002 2:15 PM | 03 |
| **zinc** | | | **Minimum** | **0.3100 mg/L** | | **Count 3** | |
| | | | **Average** | **0.4267 mg/L** | | | |
| | | | **Maximum** | **0.4900 mg/L** | | | |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 0,0,0-triethylphosphorothioate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **0,0,0-triethylphosphorothioate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.002 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.002 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,1,1,2-tetrachloroethane** | | **Minimum** | **0.0010 mg/L** | | | **Count 7** | |
| | | **Average** | **0.0039 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,1,1-trichloroethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,1,1-trichloroethane | < | 0.003 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,1,1-trichloroethane | < | 0.003 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,1,1-trichloroethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,1,1-trichloroethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,1,1-trichloroethane** | | **Minimum** | **0.0015 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0036 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,1,2,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.002 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.002 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,1,2,2-tetrachloroethane** | | **Minimum** | **0.0010 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0034 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,1,2-trichloroethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,1,2-trichloroethane | < | 0.001 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,1,2-trichloroethane | < | 0.001 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,1,2-trichloroethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,1,2-trichloroethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,1,2-trichloroethane** | | **Minimum** | **0.0005 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0032 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,1-dichloroethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,1-dichloroethane | < | 0.004 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,1-dichloroethane | < | 0.004 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,1-dichloroethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,1-dichloroethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,1-dichloroethane** | | **Minimum** | | **0.0020 mg/L** | | **Count 5** | |
| | | **Average** | | **0.0038 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1-dichloroethene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,1-dichloroethene | < | 0.005 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,1-dichloroethene | < | 0.005 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,1-dichloroethene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,1-dichloroethene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,1-dichloroethene** | | **Minimum** | | **0.0025 mg/L** | | **Count 5** | |
| | | **Average** | | **0.0040 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1-dichloropropene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,1-dichloropropene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,1-dichloropropene** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,2,3-trichlorobenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,2,3-trichlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2,3-trichlorobenzene** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,2,3-trichloropropane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,2,3-trichloropropane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2,3-trichloropropane** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,2,4,5-tetrachlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2,4,5-tetrachlorobenzene** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,2,4-trichlorobenzene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2,4-trichlorobenzene** | | **Minimum** | **0.0025 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0042 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2,4-trimethylbenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,2,4-trimethylbenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2,4-trimethylbenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2-dibromo-3-chloropropane** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2-dibromoethane** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,2-dichlorobenzene | < | 0.002 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,2-dichlorobenzene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 1,2-dichlorobenzene | < | 0.002 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,2-dichlorobenzene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2-dichlorobenzene** | | **Minimum** | **0.0010 mg/L** | | | **Count 9** | |
| | | **Average** | **0.0036 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2-dichloroethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,2-dichloroethane | < | 0.001 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,2-dichloroethane | < | 0.001 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,2-dichloroethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,2-dichloroethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2-dichloroethane** | | | **Minimum** | **0.0005 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0032 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichloroethene (cis) | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,2-dichloroethene (cis) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2-dichloroethene (cis)** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.005 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.005 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2-dichloroethene (trans)** | | | **Minimum** | **0.0025 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0040 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichloropropane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,2-dichloropropane | < | 0.003 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,2-dichloropropane | < | 0.003 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,2-dichloropropane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,2-dichloropropane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2-dichloropropane** | | | **Minimum** | **0.0015 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0036 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dinitrobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2-dinitrobenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-diphenylhydrazine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,2-diphenylhydrazine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,3,5-trimethylbenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,3,5-trimethylbenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,3,5-trimethylbenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,3,5-trinitrobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,3,5-trinitrobenzene** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,3-dichlorobenzene | < | 0.002 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,3-dichlorobenzene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 1,3-dichlorobenzene | < | 0.002 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,3-dichlorobenzene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,3-dichlorobenzene** | | **Minimum** | | **0.0010 mg/L** | | **Count 10** | |
| | | **Average** | | **0.0037 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,3-dichloropropane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,3-dichloropropane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,3-dichloropropane** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,3-dichloropropene (cis) | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.001 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.001 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,3-dichloropropene (cis) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,3-dichloropropene (cis)** | | **Minimum** | | **0.0005 mg/L** | | **Count 5** | |
| | | **Average** | | **0.0032 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,3-dichloropropene (trans) | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.001 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.001 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,3-dichloropropene (trans) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,3-dichloropropene (trans)** | | **Minimum** | | **0.0005 mg/L** | | **Count 5** | |
| | | **Average** | | **0.0032 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,3-dinitrobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,3-dinitrobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,4-dichloro-2-butene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,4-dichloro-2-butene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,4-dichloro-2-butene (cis) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,4-dichloro-2-butene (cis)** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,4-dichloro-2-butene (trans) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,4-dichloro-2-butene (trans)** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 1,4-dichlorobenzene | < | 0.001 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 1,4-dichlorobenzene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 1,4-dichlorobenzene | < | 0.001 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 1,4-dichlorobenzene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,4-dichlorobenzene** | | **Minimum** | **0.0005 mg/L** | | | **Count 9** | |
| | | **Average** | **0.0034 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,4-dinitrobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| 1,4-dinitrobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,4-dinitrobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,4-naphthoquinone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,4-naphthoquinone** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,4-phenylenediamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1,4-phenylenediamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1-acetyl-2-thiourea | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1-acetyl-2-thiourea** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1-chloronaphthalene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1-chloronaphthalene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1-naphthylamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **1-naphthylamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,2',3,3',4,4',6-heptachlorobiphenyl | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,2',3,3',4,4',6-heptachlorobiphenyl** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,2-dichloropropane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 2,2-dichloropropane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,2-dichloropropane** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,3,4,6-tetrachlorophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,3,4,6-tetrachlorophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,4,5-t | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,4,5-t** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 2,4,5-tp (silvex) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,4,5-tp (silvex)** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,4,5-trichlorophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,4,5-trichlorophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,4,5-trimethylaniline | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,4,5-trimethylaniline** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,4,6-trichlorophenol | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 2,4,6-trichlorophenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2,4,6-trichlorophenol | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 2,4,6-trichlorophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,4,6-trichlorophenol** | | **Minimum** | **0.0025 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,4-diaminotoluene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,4-diaminotoluene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,4-dichlorophenol | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 2,4-dichlorophenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2,4-dichlorophenol | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 2,4-dichlorophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,4-dichlorophenol** | | **Minimum** | **0.0025 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,4-dimethylphenol | < | 0.01 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 2,4-dimethylphenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2,4-dimethylphenol | < | 0.01 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 2,4-dimethylphenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,4-dimethylphenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,4-dinitrophenol | < | 0.025 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 2,4-dinitrophenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2,4-dinitrophenol | < | 0.025 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 2,4-dinitrophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,4-dinitrophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0088 mg/L** | | | | |
| | | **Maximum** | **0.0125 mg/L** | | | | |
| 2,4-dinitrotoluene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 2,4-dinitrotoluene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2,4-dinitrotoluene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 2,4-dinitrotoluene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| 2,4-dinitrotoluene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,4-dinitrotoluene** | | **Minimum** | **0.0025 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0040 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,6-dichlorophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| 2,6-dichlorophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,6-dichlorophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,6-dinitrotoluene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 2,6-dinitrotoluene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2,6-dinitrotoluene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2,6-dinitrotoluene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 2,6-dinitrotoluene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2,6-dinitrotoluene** | | **Minimum** | **0.0025 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0040 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2-acetylaminofluorene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-acetylaminofluorene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2-aminoanthraquinone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-aminoanthraquinone** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2-butanone | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 2-butanone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-butanone** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 2-chloroethylvinyl ether | < | 0.025 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| 2-chloroethylvinyl ether | < | 0.025 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| 2-chloroethylvinyl ether | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2-chloroethylvinyl ether | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| 2-chloroethylvinyl ether | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-chloroethylvinyl ether** | | **Minimum** | | **0.0050 mg/L** | | **Count 5** | |
| | | **Average** | | **0.0080 mg/L** | | | |
| | | **Maximum** | | **0.0125 mg/L** | | | |
| 2-chloronaphthalene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 2-chloronaphthalene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2-chloronaphthalene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 2-chloronaphthalene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-chloronaphthalene** | | **Minimum** | | **0.0025 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0038 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 2-chlorophenol | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 2-chlorophenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2-chlorophenol | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 2-chlorophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-chlorophenol** | | **Minimum** | | **0.0025 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0038 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 2-chlorotoluene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 2-chlorotoluene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-chlorotoluene** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 2-cyclohexyl-4,6-dinitrophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-cyclohexyl-4,6-dinitrophenol** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 2-hexanone | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 2-hexanone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-hexanone** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-methyl-4,6-dinitrophenol | < | 0.01 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 2-methyl-4,6-dinitrophenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2-methyl-4,6-dinitrophenol | < | 0.01 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 2-methyl-4,6-dinitrophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-methyl-4,6-dinitrophenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-methylnaphthalene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-methylnaphthalene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-methylphenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2-methylphenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-methylphenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-naphthylamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-naphthylamine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-nitroaniline | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-nitroaniline** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-nitrophenol | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 2-nitrophenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 2-nitrophenol | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 2-nitrophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-nitrophenol** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 2-picoline | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **2-picoline** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3-(chloromethyl) pyridine hydrochloride | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **3-(chloromethyl) pyridine hydrochloride** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3,3'-dichlorobenzidine | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 3,3'-dichlorobenzidine | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 3,3'-dichlorobenzidine | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 3,3'-dichlorobenzidine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **3,3'-dichlorobenzidine** | | **Minimum** | **0.0025 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3,3'-dimethoxybenzidine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **3,3'-dimethoxybenzidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3,3'-dimethylbenzidine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **3,3'-dimethylbenzidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3,4-methylphenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **3,4-methylphenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3-methylcholanthrene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **3-methylcholanthrene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3-methylphenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **3-methylphenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 3-nitroaniline | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **3-nitroaniline** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4,4'-ddd (p,p'-tde) | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 4,4'-ddd (p,p'-tde) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4,4'-ddd (p,p'-tde)** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4,4'-dde (p,p'-ddx) | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 4,4'-dde (p,p'-ddx) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4,4'-dde (p,p'-ddx)** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4,4'-ddt | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 4,4'-ddt | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4,4'-ddt** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4,4'methylenebis(2-chloroaniline) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4,4'methylenebis(2-chloroaniline)** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4,4'-oxydianiline | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4,4'-oxydianiline** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4,6-dinitro-2-methylphenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4,6-dinitro-2-methylphenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4-aminobiphenyl | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-aminobiphenyl** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4-bromophenyl phenyl ether | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 4-bromophenyl phenyl ether | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 4-bromophenyl phenyl ether | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 4-bromophenyl phenyl ether | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-bromophenyl phenyl ether** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 4-chloro-3-methylphenol | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 4-chloro-3-methylphenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 4-chloro-3-methylphenol | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 4-chloro-3-methylphenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-chloro-3-methylphenol** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 4-chloroaniline | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-chloroaniline** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 4-chlorophenyl phenyl ether | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 4-chlorophenyl phenyl ether | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 4-chlorophenyl phenyl ether | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 4-chlorophenyl phenyl ether | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-chlorophenyl phenyl ether** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 4-chlorotoluene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 4-chlorotoluene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-chlorotoluene** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 4-isopropyltoluene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-isopropyltoluene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 4-methyl-2-pentanone | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| 4-methyl-2-pentanone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-methyl-2-pentanone** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 4-methylphenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 4-methylphenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-methylphenol** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 4-nitroaniline | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-nitroaniline** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 4-nitrobiphenyl | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-nitrobiphenyl** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 4-nitrophenol | < | 0.025 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| 4-nitrophenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| 4-nitrophenol | < | 0.025 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| 4-nitrophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **4-nitrophenol** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0088 mg/L** | | | |
| | | **Maximum** | | **0.0125 mg/L** | | | |
| 5,5-diphenylhydantoin | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **5,5-diphenylhydantoin** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 5-chloro-2-methylaniline | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **5-chloro-2-methylaniline** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 5-nitroacenaphthene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **5-nitroacenaphthene** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 5-nitro-o-anisidine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **5-nitro-o-anisidine** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 5-nitro-o-toluidine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **5-nitro-o-toluidine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 7,12-dimethylbenz[a]anthracene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **7,12-dimethylbenz[a]anthracene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| acenaphthene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| acenaphthene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| acenaphthene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| acenaphthene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **acenaphthene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| acenaphthylene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| acenaphthylene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| acenaphthylene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| acenaphthylene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **acenaphthylene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| acetone | < | 0.015 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| acetone | = | 1.6 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **acetone** | | | **Minimum** | **0.0075 mg/L** | | **Count 2** | |
| | | | **Average** | **0.8038 mg/L** | | | |
| | | | **Maximum** | **1.6000 mg/L** | | | |
| acetonitrile | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **acetonitrile** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| acetophenone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **acetophenone** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| acrolein | < | 0.05 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| acrolein | < | 0.05 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| acrolein | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| acrolein | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **acrolein** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0150 mg/L** | | | |
| | | | **Maximum** | **0.0250 mg/L** | | | |
| acrylonitrile | < | 0.025 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| acrylonitrile | < | 0.025 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| acrylonitrile | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| acrylonitrile | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **acrylonitrile** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0088 mg/L** | | | |
| | | | **Maximum** | **0.0125 mg/L** | | | |
| alachlor | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **alachlor** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| aldrin | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| aldrin | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **aldrin** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| allyl chloride | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **allyl chloride** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| alpha,alpha-dimethylphenethylamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **alpha,alpha-dimethylphenethylamine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| aminoazobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **aminoazobenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| anilazine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **anilazine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| aniline | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **aniline** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| anthracene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| anthracene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| anthracene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| anthracene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **anthracene** | | **Minimum** | | **0.0025 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0038 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| aramite | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| aramite | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **aramite** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| arsenic | = | 0.0016 | mg/L | city | composite | 01/22/2002 12:57 PM | 1B |
| arsenic | < | 0.05 | mg/L | self | composite | 03/07/2002 8:35 AM | 1B |
| arsenic | < | 0.05 | mg/L | self | composite | 06/15/2002 | 1B |
| arsenic | < | 0.001 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| arsenic | < | 0.05 | mg/L | self | composite | 09/05/2002 7:30 AM | 1B |
| arsenic | = | 0.00129 | mg/L | city | composite | 09/11/2002 9:53 AM | 1B |
| arsenic | = | 0.0016 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| arsenic | < | 0.05 | mg/L | self | composite | 12/05/2002 6:20 AM | 1B |
| **arsenic** | | **Minimum** | | **0.0005 mg/L** | | **Count 8** | |
| | | **Average** | | **0.0131 mg/L** | | | |
| | | **Maximum** | | **0.0250 mg/L** | | | |
| azinphos methyl | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **azinphos methyl** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| azobenzene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| azobenzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| azobenzene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| **azobenzene** | | **Minimum** | | **0.0025 mg/L** | | **Count 3** | |
| | | **Average** | | **0.0033 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| barban | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **barban** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| benzene | < | 0.002 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| benzene | < | 0.002 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| benzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| benzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **benzene** | | | **Minimum** | **0.0010 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0034 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzidine | < | 0.05 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| benzidine | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| benzidine | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| benzidine | < | 0.05 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| benzidine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **benzidine** | | | **Minimum** | **0.0050 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0130 mg/L** | | | |
| | | | **Maximum** | **0.0250 mg/L** | | | |
| benzo(a)anthracene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| benzo(a)anthracene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| benzo(a)anthracene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| benzo(a)anthracene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **benzo(a)anthracene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzo(a)pyrene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| benzo(a)pyrene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| benzo(a)pyrene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| benzo(a)pyrene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **benzo(a)pyrene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzo(b)fluoranthene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| benzo(b)fluoranthene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| benzo(b)fluoranthene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| benzo(b)fluoranthene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **benzo(b)fluoranthene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzo(g,h,i)perylene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| benzo(g,h,i)perylene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| benzo(g,h,i)perylene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| benzo(g,h,i)perylene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **benzo(g,h,i)perylene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzo(k)fluoranthene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| benzo(k)fluoranthene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| benzo(k)fluoranthene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| benzo(k)fluoranthene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **benzo(k)fluoranthene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzoic acid | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **benzoic acid** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzyl alcohol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| benzyl alcohol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **benzyl alcohol** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzyl butyl phthalate | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| benzyl butyl phthalate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **benzyl butyl phthalate** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bhc, alpha | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| bhc, alpha | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bhc, alpha** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bhc, beta | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469:001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| bhc, beta | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bhc, beta** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bhc, delta | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| bhc, delta | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bhc, delta** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bhc, gamma (lindane) | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| bhc, gamma (lindane) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bhc, gamma (lindane)** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bis(2-chloroethoxy) methane | < | 0.01 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| bis(2-chloroethoxy) methane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| bis(2-chloroethoxy) methane | < | 0.01 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| bis(2-chloroethoxy) methane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bis(2-chloroethoxy) methane** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bis(2-chloroethyl) ether | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| bis(2-chloroethyl) ether | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| bis(2-chloroethyl) ether | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| bis(2-chloroethyl) ether | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bis(2-chloroethyl) ether** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bis(2-chloroisopropyl) ether | < | 0.01 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| bis(2-chloroisopropyl) ether | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| bis(2-chloroisopropyl) ether | < | 0.01 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| bis(2-chloroisopropyl) ether | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bis(2-chloroisopropyl) ether** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bis(2-ethylhexyl)phthalate | = | 0.0276 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| bis(2-ethylhexyl)phthalate | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| bis(2-ethylhexyl)phthalate | = | 0.0185 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| bis(2-ethylhexyl)phthalate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bis(2-ethylhexyl)phthalate** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0140 mg/L** | | | |
| | | | **Maximum** | **0.0276 mg/L** | | | |
| bromobenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| bromobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bromobenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bromochloromethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| bromochloromethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bromochloromethane** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bromodichloromethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| bromodichloromethane | < | 0.002 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| bromodichloromethane | < | 0.002 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| bromodichloromethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| bromodichloromethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bromodichloromethane** | | | **Minimum** | **0.0010 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0034 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bromoform | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| bromoform | < | 0.002 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| bromoform | < | 0.002 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| bromoform | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| bromoform | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bromoform** | | | **Minimum** | **0.0010 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0034 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| bromomethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| bromomethane | < | 0.005 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| bromomethane | < | 0.005 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| bromomethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| bromomethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bromomethane** | | | **Minimum** | **0.0025 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0040 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id 1592

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| bromoxynil | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **bromoxynil** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| butyl benzyl phthalate | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| butyl benzyl phthalate | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| butyl benzyl phthalate | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| butyl benzyl phthalate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **butyl benzyl phthalate** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| captafol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **captafol** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| captan | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **captan** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| carbaryl | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **carbaryl** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| carbazole | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **carbazole** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| carbofuran | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **carbofuran** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| carbon disulfide | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| carbon disulfide | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **carbon disulfide** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| carbon tetrachloride | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |

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Org Id 1592

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| carbon tetrachloride | < | 0.003 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| carbon tetrachloride | < | 0.003 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| carbon tetrachloride | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| carbon tetrachloride | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **carbon tetrachloride** | | **Minimum** | **0.0015 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0036 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| carbophenothion | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **carbophenothion** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| chlordane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| chlordane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **chlordane** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| chlorfenvinphos | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **chlorfenvinphos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| chlorobenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| chlorobenzene | < | 0.002 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| chlorobenzene | < | 0.002 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| chlorobenzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| chlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **chlorobenzene** | | **Minimum** | **0.0010 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0034 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| chlorobenzilate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **chlorobenzilate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| chloroethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| chloroethane | < | 0.005 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| chloroethane | < | 0.005 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| chloroethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| chloroethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **chloroethane** | | **Minimum** | | **0.0025 mg/L** | | **Count 5** | |
| | | **Average** | | **0.0040 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| chloroform | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| chloroform | < | 0.002 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| chloroform | = | 0.0022 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| chloroform | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| chloroform | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **chloroform** | | **Minimum** | | **0.0010 mg/L** | | **Count 5** | |
| | | **Average** | | **0.0036 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| chloromethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| chloromethane | < | 0.005 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| chloromethane | < | 0.005 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| chloromethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| chloromethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **chloromethane** | | **Minimum** | | **0.0025 mg/L** | | **Count 5** | |
| | | **Average** | | **0.0040 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| chloroprene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **chloroprene** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| chrysene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| chrysene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| chrysene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| chrysene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **chrysene** | | **Minimum** | | **0.0025 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0038 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| coumaphos | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **coumaphos** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| crotoxyphos | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **crotoxyphos** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dalapon | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dalapon** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| demeton-o | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **demeton-o** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| demeton-s | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **demeton-s** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| di(2-ethylhexyl)adipate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **di(2-ethylhexyl)adipate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| diallate (trans or cis) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **diallate (trans or cis)** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dibenzo(a,e)pyrene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dibenzo(a,e)pyrene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dibenzo(a,h)anthracene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| dibenzo(a,h)anthracene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| dibenzo(a,h)anthracene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| dibenzo(a,h)anthracene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dibenzo(a,h)anthracene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| dibenzo(a,j)acridine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dibenzo(a,j)acridine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dibenzofuran | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dibenzofuran** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dibromochloromethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| dibromochloromethane | < | 0.001 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| dibromochloromethane | < | 0.001 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| dibromochloromethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| dibromochloromethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dibromochloromethane** | | | **Minimum** | **0.0005 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0032 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dibromomethane | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| dibromomethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| dibromomethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dibromomethane** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dicamba | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dicamba** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dichlone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dichlone** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dichlorodifluoromethane (freon-12) | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| dichlorodifluoromethane (freon-12) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dichlorodifluoromethane (freon-12)** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| dichlorovos | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dichlorovos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| dicrotophos | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dicrotophos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| dieldrin | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| dieldrin | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dieldrin** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| diethyl phthalate | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| diethyl phthalate | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| diethyl phthalate | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| diethyl phthalate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **diethyl phthalate** | | **Minimum** | **0.0025 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| diethyl sulfate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| diethyl sulfate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **diethyl sulfate** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| diethylstilbesterol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **diethylstilbesterol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| dimethoate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dimethoate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| dimethyl phthalate | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| dimethyl phthalate | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| dimethyl phthalate | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| dimethyl phthalate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dimethyl phthalate** | | **Minimum** | **0.0025 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| di-n-butyl phthalate | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| di-n-butyl phthalate | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| di-n-butyl phthalate | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| di-n-butyl phthalate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **di-n-butyl phthalate** | | **Minimum** | **0.0025 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| dinocap | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dinocap** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| di-n-octyl phthalate | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| di-n-octyl phthalate | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| di-n-octyl phthalate | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| di-n-octyl phthalate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **di-n-octyl phthalate** | | **Minimum** | **0.0025 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| dinoseb | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **dinoseb** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| diphenylamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **diphenylamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| disulfoton | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **disulfoton** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| endosulfan I | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| endosulfan I | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **endosulfan I** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| endosulfan II | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| endosulfan II | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **endosulfan II** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| endosulfan sulfate | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| endosulfan sulfate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **endosulfan sulfate** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| endrin | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| endrin | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **endrin** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| endrin aldehyde | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| endrin aldehyde | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **endrin aldehyde** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| endrin ketone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **endrin ketone** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| epn | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **epn** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| ethion | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **ethion** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| ethyl benzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |

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Org Id 1592

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| ethyl benzene | < | 0.003 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| ethyl benzene | < | 0.003 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| ethyl benzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| ethyl benzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **ethyl benzene** | | | **Minimum** | **0.0015 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0036 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| ethyl carbamate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **ethyl carbamate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| ethyl methacrylate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **ethyl methacrylate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| ethyl methanesulfonate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **ethyl methanesulfonate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| famphur | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **famphur** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| fensulfothion | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **fensulfothion** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| fenthion | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **fenthion** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| fluchloralin | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **fluchloralin** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| fluoranthene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| fluoranthene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| fluoranthene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| fluoranthene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **fluoranthene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| fluorene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| fluorene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| fluorene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| fluorene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **fluorene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| fluoride | < | 1 | mg/L | city | composite | 01/22/2002 12:57 PM | 1B |
| fluoride | < | 1 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| fluoride | = | 1 | mg/L | city | composite | 09/11/2002 9:53 AM | 1B |
| fluoride | < | 1 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| **fluoride** | | | **Minimum** | **0.5000 mg/L** | | **Count 4** | |
| | | | **Average** | **0.6250 mg/L** | | | |
| | | | **Maximum** | **1.0000 mg/L** | | | |
| group sum | = | 0.0214 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| **group sum** | | | **Minimum** | **0.0214 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0214 mg/L** | | | |
| | | | **Maximum** | **0.0214 mg/L** | | | |
| heptachlor | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| heptachlor | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **heptachlor** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| heptachlor epoxide | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| heptachlor epoxide | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **heptachlor epoxide** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| hexachlorobenzene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| hexachlorobenzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| hexachlorobenzene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| hexachlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **hexachlorobenzene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **hexachlorobutadiene** | | | **Minimum** | **0.0050 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| hexachlorocyclopentadiene | < | 0.01 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| hexachlorocyclopentadiene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| hexachlorocyclopentadiene | < | 0.01 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| hexachlorocyclopentadiene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **hexachlorocyclopentadiene** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| hexachloroethane | < | 0.01 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| hexachloroethane | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| hexachloroethane | < | 0.01 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| hexachloroethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **hexachloroethane** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| hexachlorophene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **hexachlorophene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| hexachloropropene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **hexachloropropene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| hexamethyl phosphoramide | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **hexamethyl phosphoramide** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| hydroquinone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **hydroquinone** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| indeno (1,2,3-cd) pyrene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| indeno (1,2,3-cd) pyrene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| indeno (1,2,3-cd) pyrene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| indeno (1,2,3-cd) pyrene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **indeno (1,2,3-cd) pyrene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| isobutyl alcohol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **isobutyl alcohol** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| isodrin | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **isodrin** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| isophorone | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| isophorone | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| isophorone | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| isophorone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **isophorone** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| isopropylbenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| isopropylbenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **isopropylbenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| isosafrole | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **isosafrole** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| kepone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **kepone** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| leptophos | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **leptophos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| malathion | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **malathion** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| maleic anhydride | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **maleic anhydride** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| mcpa | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **mcpa** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| mcpp | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **mcpp** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| mestranol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **mestranol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methapyrilene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **methapyrilene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| methoxychlor | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **methoxychlor** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methyl iodide | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| methyl iodide | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **methyl iodide** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methyl parathion | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **methyl parathion** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methyl tert-butyl ether | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| **methyl tert-butyl ether** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methylacrylonitrile | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **methylacrylonitrile** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methylene chloride | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| methylene chloride | < | 0.005 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| methylene chloride | < | 0.005 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| methylene chloride | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| methylene chloride | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **methylene chloride** | | **Minimum** | **0.0025 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0040 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methylmethanesulfonate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **methylmethanesulfonate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| mevinphos | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **mevinphos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id 1592

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| mexacarbate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **mexacarbate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| mirex | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **mirex** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| molybdenum | < | 0.2 | mg/L | city | composite | 01/22/2002 12:57 PM | 1B |
| molybdenum | < | 0.02 | mg/L | self | composite | 03/07/2002 8:35 AM | 1B |
| molybdenum | < | 0.2 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| molybdenum | < | 0.2 | mg/L | city | composite | 09/11/2002 9:53 AM | 1B |
| molybdenum | < | 0.2 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| **molybdenum** | | **Minimum** | **0.0100 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0820 mg/L** | | | | |
| | | **Maximum** | **0.1000 mg/L** | | | | |
| monocrotophos | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **monocrotophos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| naled | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **naled** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| naphthalene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| naphthalene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| naphthalene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| naphthalene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| naphthalene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| naphthalene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **naphthalene** | | **Minimum** | **0.0025 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0042 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-butylbenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| n-butylbenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **n-butylbenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| nicotine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **nicotine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| nitrobenzene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| nitrobenzene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| nitrobenzene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| nitrobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **nitrobenzene** | | **Minimum** | **0.0025 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| nitrofen | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **nitrofen** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| nitroquinoline-1-oxide | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **nitroquinoline-1-oxide** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-ninitrosopiperidine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **n-ninitrosopiperidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-nitrosodibutylamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **n-nitrosodibutylamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-nitrosodiethylamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **n-nitrosodiethylamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-nitrosodimethylamine | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| n-nitrosodimethylamine | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| n-nitrosodimethylamine | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| n-nitrosodimethylamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **n-nitrosodimethylamine** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| n-nitroso-di-n-propylamine | < | 0.01 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| n-nitroso-di-n-propylamine | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| n-nitroso-di-n-propylamine | < | 0.01 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| n-nitroso-di-n-propylamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **n-nitroso-di-n-propylamine** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| n-nitrosodiphenylamine | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| n-nitrosodiphenylamine | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| n-nitrosodiphenylamine | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| n-nitrosodiphenylamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **n-nitrosodiphenylamine** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| n-nitrosomethylethylamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| n-nitrosomethylethylamine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **n-nitrosomethylethylamine** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| n-nitrosomorpholine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **n-nitrosomorpholine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| n-nitrosopyrrolidine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **n-nitrosopyrrolidine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| n-propylbenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| n-propylbenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **n-propylbenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| o-anisidine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **o-anisidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| octamethylpyrophosphoramide | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **octamethylpyrophosphoramide** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| o-toluidine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **o-toluidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| o-xylene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **o-xylene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| parathion | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **parathion** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| p-benzoquinone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| p-benzoquinone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **p-benzoquinone** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pcb 1016 | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| pcb 1016 | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pcb 1016** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pcb 1221 | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| pcb 1221 | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pcb 1221** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pcb 1232 | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |

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Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pcb 1232 | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pcb 1232** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pcb 1242 | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| pcb 1242 | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pcb 1242** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pcb 1248 | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| pcb 1248 | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pcb 1248** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pcb 1254 | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| pcb 1254 | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pcb 1254** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pcb 1260 | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| pcb 1260 | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pcb 1260** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| p-cresidine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **p-cresidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| p-dimethylaminoazobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **p-dimethylaminoazobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pentachlorobenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pentachlorobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pentachloroethane | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pentachloroethane** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| pentachloronitrobenzene (pcnb) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pentachloronitrobenzene (pcnb)** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| pentachlorophenol | < | 0.01 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| pentachlorophenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| pentachlorophenol | < | 0.01 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| pentachlorophenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pentachlorophenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| pH | = | | std units | self | continuous | 01/01/2002 | 1B |
| pH | = | | std units | self | continuous | 01/02/2002 | 1B |
| pH | = | | std units | self | continuous | 01/03/2002 | 1B |
| pH | = | | std units | self | continuous | 01/04/2002 | 1B |
| pH | = | | std units | self | continuous | 01/05/2002 | 1B |
| pH | = | | std units | self | continuous | 01/06/2002 | 1B |
| pH | = | | std units | self | continuous | 01/07/2002 | 1B |
| pH | = | | std units | self | continuous | 01/08/2002 | 1B |
| pH | = | | std units | self | continuous | 01/09/2002 | 1B |
| pH | = | | std units | self | continuous | 01/10/2002 | 1B |
| pH | = | | std units | self | continuous | 01/11/2002 | 1B |
| pH | = | | std units | self | continuous | 01/12/2002 | 1B |
| pH | = | | std units | self | continuous | 01/13/2002 | 1B |
| pH | = | | std units | self | continuous | 01/14/2002 | 1B |
| pH | = | | std units | self | continuous | 01/15/2002 | 1B |
| pH | = | | std units | self | continuous | 01/16/2002 | 1B |
| pH | = | | std units | self | continuous | 01/17/2002 | 1B |
| pH | = | | std units | self | continuous | 01/18/2002 | 1B |
| pH | = | | std units | self | continuous | 01/19/2002 | 1B |
| pH | = | | std units | self | continuous | 01/20/2002 | 1B |
| pH | = | | std units | self | continuous | 01/21/2002 | 1B |
| pH | = | | std units | self | continuous | 01/22/2002 | 1B |
| pH | = | 8.9 | std units | city | grab | 01/22/2002 12:55 PM | 1B |
| pH | = | | std units | self | continuous | 01/23/2002 | 1B |
| pH | = | | std units | self | continuous | 01/24/2002 | 1B |
| pH | = | | std units | self | continuous | 01/25/2002 | 1B |
| pH | = | | std units | self | continuous | 01/26/2002 | 1B |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **WACKER SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 01/27/2002 | 1B |
| pH | = | | std units | self | continuous | 01/28/2002 | 1B |
| pH | = | | std units | self | continuous | 01/29/2002 | 1B |
| pH | = | | std units | self | continuous | 01/30/2002 | 1B |
| pH | = | | std units | self | continuous | 01/31/2002 | 1B |
| pH | = | | std units | self | continuous | 02/01/2002 | 1B |
| pH | = | | std units | self | continuous | 02/02/2002 | 1B |
| pH | = | | std units | self | continuous | 02/03/2002 | 1B |
| pH | = | | std units | self | continuous | 02/04/2002 | 1B |
| pH | = | | std units | self | continuous | 02/05/2002 | 1B |
| pH | = | | std units | self | continuous | 02/06/2002 | 1B |
| pH | = | | std units | self | continuous | 02/07/2002 | 1B |
| pH | = | | std units | self | continuous | 02/08/2002 | 1B |
| pH | = | | std units | self | continuous | 02/09/2002 | 1B |
| pH | = | | std units | self | continuous | 02/10/2002 | 1B |
| pH | = | | std units | self | continuous | 02/11/2002 | 1B |
| pH | = | | std units | self | continuous | 02/12/2002 | 1B |
| pH | = | | std units | self | continuous | 02/13/2002 | 1B |
| pH | = | | std units | self | continuous | 02/14/2002 | 1B |
| pH | = | | std units | self | continuous | 02/15/2002 | 1B |
| pH | = | | std units | self | continuous | 02/16/2002 | 1B |
| pH | = | | std units | self | continuous | 02/17/2002 | 1B |
| pH | = | | std units | self | continuous | 02/18/2002 | 1B |
| pH | = | | std units | self | continuous | 02/19/2002 | 1B |
| pH | = | | std units | self | continuous | 02/20/2002 | 1B |
| pH | = | | std units | self | continuous | 02/21/2002 | 1B |
| pH | = | | std units | self | continuous | 02/22/2002 | 1B |
| pH | = | | std units | self | continuous | 02/23/2002 | 1B |
| pH | = | | std units | self | continuous | 02/24/2002 | 1B |
| pH | = | | std units | self | continuous | 02/25/2002 | 1B |
| pH | = | | std units | self | continuous | 02/26/2002 | 1B |
| pH | = | | std units | self | continuous | 02/27/2002 | 1B |
| pH | = | | std units | self | continuous | 02/28/2002 | 1B |
| pH | = | | std units | self | continuous | 03/01/2002 | 1B |
| pH | = | | std units | self | continuous | 03/02/2002 | 1B |
| pH | = | | std units | self | continuous | 03/03/2002 | 1B |
| pH | = | | std units | self | continuous | 03/04/2002 | 1B |
| pH | = | | std units | self | continuous | 03/05/2002 | 1B |
| pH | = | | std units | self | continuous | 03/06/2002 | 1B |
| pH | = | | std units | self | continuous | 03/07/2002 | 1B |
| pH | = | | std units | self | continuous | 03/08/2002 | 1B |
| pH | = | | std units | self | continuous | 03/09/2002 | 1B |
| pH | = | | std units | self | continuous | 03/10/2002 | 1B |
| pH | = | | std units | self | continuous | 03/11/2002 | 1B |
| pH | = | | std units | self | continuous | 03/12/2002 | 1B |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 03/13/2002 | 1B |
| pH | = | | std units | self | continuous | 03/14/2002 | 1B |
| pH | = | | std units | self | continuous | 03/15/2002 | 1B |
| pH | = | | std units | self | continuous | 03/16/2002 | 1B |
| pH | = | | std units | self | continuous | 03/17/2002 | 1B |
| pH | = | | std units | self | continuous | 03/18/2002 | 1B |
| pH | = | | std units | self | continuous | 03/19/2002 | 1B |
| pH | = | | std units | self | continuous | 03/20/2002 | 1B |
| pH | = | | std units | self | continuous | 03/21/2002 | 1B |
| pH | = | | std units | self | continuous | 03/22/2002 | 1B |
| pH | = | | std units | self | continuous | 03/23/2002 | 1B |
| pH | = | | std units | self | continuous | 03/24/2002 | 1B |
| pH | = | | std units | self | continuous | 03/25/2002 | 1B |
| pH | = | | std units | self | continuous | 03/26/2002 | 1B |
| pH | = | | std units | self | continuous | 03/27/2002 | 1B |
| pH | = | | std units | self | continuous | 03/28/2002 | 1B |
| pH | = | | std units | self | continuous | 03/29/2002 | 1B |
| pH | = | | std units | self | continuous | 03/30/2002 | 1B |
| pH | = | | std units | self | continuous | 03/31/2002 | 1B |
| pH | = | | std units | self | continuous | 04/01/2002 | 1B |
| pH | = | | std units | self | continuous | 04/02/2002 | 1B |
| pH | = | | std units | self | continuous | 04/03/2002 | 1B |
| pH | = | | std units | self | continuous | 04/04/2002 | 1B |
| pH | = | | std units | self | continuous | 04/05/2002 | 1B |
| pH | = | | std units | self | continuous | 04/06/2002 | 1B |
| pH | = | | std units | self | continuous | 04/07/2002 | 1B |
| pH | = | | std units | self | continuous | 04/08/2002 | 1B |
| pH | = | | std units | self | continuous | 04/09/2002 | 1B |
| pH | = | | std units | self | continuous | 04/10/2002 | 1B |
| pH | = | | std units | self | continuous | 04/11/2002 | 1B |
| pH | = | | std units | self | continuous | 04/12/2002 | 1B |
| pH | = | | std units | self | continuous | 04/13/2002 | 1B |
| pH | = | | std units | self | continuous | 04/14/2002 | 1B |
| pH | = | | std units | self | continuous | 04/15/2002 | 1B |
| pH | = | | std units | self | continuous | 04/16/2002 | 1B |
| pH | = | | std units | self | continuous | 04/17/2002 | 1B |
| pH | = | | std units | self | continuous | 04/18/2002 | 1B |
| pH | = | | std units | self | continuous | 04/19/2002 | 1B |
| pH | = | | std units | self | continuous | 04/20/2002 | 1B |
| pH | = | | std units | self | continuous | 04/21/2002 | 1B |
| pH | = | | std units | self | continuous | 04/22/2002 | 1B |
| pH | = | | std units | self | continuous | 04/23/2002 | 1B |
| pH | = | | std units | self | continuous | 04/24/2002 | 1B |
| pH | = | | std units | self | continuous | 04/25/2002 | 1B |
| pH | = | | std units | self | continuous | 04/26/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 04/27/2002 | 1B |
| pH | = | | std units | city | continuous | 04/28/2002 | 1B |
| pH | = | | std units | city | continuous | 04/29/2002 | 1B |
| pH | = | | std units | self | continuous | 04/30/2002 | 1B |
| pH | = | | std units | self | continuous | 05/01/2002 | 1B |
| pH | = | | std units | self | continuous | 05/02/2002 | 1B |
| pH | = | | std units | self | continuous | 05/03/2002 | 1B |
| pH | = | | std units | self | continuous | 05/04/2002 | 1B |
| pH | = | | std units | self | continuous | 05/05/2002 | 1B |
| pH | = | | std units | self | continuous | 05/06/2002 | 1B |
| pH | = | | std units | self | continuous | 05/07/2002 | 1B |
| pH | = | | std units | self | continuous | 05/08/2002 | 1B |
| pH | = | | std units | self | continuous | 05/09/2002 | 1B |
| pH | = | | std units | self | continuous | 05/10/2002 | 1B |
| pH | = | | std units | self | continuous | 05/11/2002 | 1B |
| pH | = | | std units | self | continuous | 05/12/2002 | 1B |
| pH | = | | std units | self | continuous | 05/13/2002 | 1B |
| pH | = | | std units | self | continuous | 05/14/2002 | 1B |
| pH | = | | std units | self | continuous | 05/15/2002 | 1B |
| pH | = | | std units | self | continuous | 05/16/2002 | 1B |
| pH | = | | std units | self | continuous | 05/17/2002 | 1B |
| pH | = | | std units | self | continuous | 05/18/2002 | 1B |
| pH | = | | std units | self | continuous | 05/19/2002 | 1B |
| pH | = | | std units | self | continuous | 05/20/2002 | 1B |
| pH | = | | std units | self | continuous | 05/21/2002 | 1B |
| pH | = | | std units | self | continuous | 05/22/2002 | 1B |
| pH | = | | std units | self | continuous | 05/23/2002 | 1B |
| pH | = | | std units | self | continuous | 05/24/2002 | 1B |
| pH | = | | std units | self | continuous | 05/25/2002 | 1B |
| pH | = | | std units | self | continuous | 05/26/2002 | 1B |
| pH | = | | std units | self | continuous | 05/27/2002 | 1B |
| pH | = | | std units | self | continuous | 05/28/2002 | 1B |
| pH | = | | std units | self | continuous | 05/29/2002 | 1B |
| pH | = | | std units | self | continuous | 05/30/2002 | 1B |
| pH | = | | std units | self | continuous | 05/31/2002 | 1B |
| pH | = | | std units | self | continuous | 06/01/2002 | 1B |
| pH | = | | std units | self | continuous | 06/02/2002 | 1B |
| pH | = | | std units | self | continuous | 06/03/2002 | 1B |
| pH | = | | std units | self | continuous | 06/04/2002 | 1B |
| pH | = | | std units | self | continuous | 06/05/2002 | 1B |
| pH | = | | std units | self | continuous | 06/06/2002 | 1B |
| pH | = | | std units | self | continuous | 06/07/2002 | 1B |
| pH | = | | std units | self | continuous | 06/08/2002 | 1B |
| pH | = | | std units | self | continuous | 06/09/2002 | 1B |
| pH | = | | std units | self | continuous | 06/10/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 06/11/2002 | 1B |
| pH | = | | std units | self | continuous | 06/12/2002 | 1B |
| pH | = | | std units | self | continuous | 06/13/2002 | 1B |
| pH | = | | std units | self | continuous | 06/14/2002 | 1B |
| pH | = | | std units | self | continuous | 06/15/2002 | 1B |
| pH | = | | std units | self | continuous | 06/16/2002 | 1B |
| pH | = | | std units | self | continuous | 06/17/2002 | 1B |
| pH | = | | std units | self | continuous | 06/18/2002 | 1B |
| pH | = | | std units | self | continuous | 06/19/2002 | 1B |
| pH | = | | std units | self | continuous | 06/20/2002 | 1B |
| pH | = | | std units | self | continuous | 06/21/2002 | 1B |
| pH | = | | std units | self | continuous | 06/22/2002 | 1B |
| pH | = | | std units | self | continuous | 06/23/2002 | 1B |
| pH | = | | std units | self | continuous | 06/24/2002 | 1B |
| pH | = | | std units | self | continuous | 06/25/2002 | 1B |
| pH | = | | std units | self | continuous | 06/26/2002 | 1B |
| pH | = | | std units | self | continuous | 06/27/2002 | 1B |
| pH | = | 7.2 | std units | city | grab | 06/27/2002 8:42 AM | 1B |
| pH | = | | std units | self | continuous | 06/28/2002 | 1B |
| pH | = | | std units | self | continuous | 06/29/2002 | 1B |
| pH | = | | std units | self | continuous | 06/30/2002 | 1B |
| pH | = | | std units | self | continuous | 07/01/2002 | 1B |
| pH | = | | std units | self | continuous | 07/02/2002 | 1B |
| pH | = | | std units | self | continuous | 07/03/2002 | 1B |
| pH | = | | std units | self | continuous | 07/04/2002 | 1B |
| pH | = | | std units | self | continuous | 07/05/2002 | 1B |
| pH | = | | std units | self | continuous | 07/06/2002 | 1B |
| pH | = | | std units | self | continuous | 07/07/2002 | 1B |
| pH | = | | std units | self | continuous | 07/08/2002 | 1B |
| pH | = | | std units | self | continuous | 07/09/2002 | 1B |
| pH | = | | std units | self | continuous | 07/10/2002 | 1B |
| pH | = | | std units | self | continuous | 07/11/2002 | 1B |
| pH | = | | std units | self | continuous | 07/12/2002 | 1B |
| pH | = | | std units | self | continuous | 07/13/2002 | 1B |
| pH | = | | std units | self | continuous | 07/14/2002 | 1B |
| pH | = | | std units | self | continuous | 07/15/2002 | 1B |
| pH | = | | std units | self | continuous | 07/16/2002 | 1B |
| pH | = | | std units | self | continuous | 07/17/2002 | 1B |
| pH | = | | std units | self | continuous | 07/18/2002 | 1B |
| pH | = | | std units | self | continuous | 07/19/2002 | 1B |
| pH | = | | std units | self | continuous | 07/20/2002 | 1B |
| pH | = | | std units | self | continuous | 07/21/2002 | 1B |
| pH | = | | std units | self | continuous | 07/22/2002 | 1B |
| pH | = | | std units | self | continuous | 07/23/2002 | 1B |
| pH | = | | std units | self | continuous | 07/24/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP**

Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 07/25/2002 | 1B |
| pH | = | | std units | self | continuous | 07/26/2002 | 1B |
| pH | = | | std units | self | continuous | 07/27/2002 | 1B |
| pH | = | | std units | self | continuous | 07/28/2002 | 1B |
| pH | = | | std units | self | continuous | 07/29/2002 | 1B |
| pH | = | | std units | self | continuous | 07/30/2002 | 1B |
| pH | = | | std units | self | continuous | 07/31/2002 | 1B |
| pH | = | | std units | self | continuous | 08/01/2002 | 1B |
| pH | = | | std units | self | continuous | 08/02/2002 | 1B |
| pH | = | | std units | self | continuous | 08/03/2002 | 1B |
| pH | = | | std units | self | continuous | 08/04/2002 | 1B |
| pH | = | | std units | self | continuous | 08/05/2002 | 1B |
| pH | = | | std units | self | continuous | 08/06/2002 | 1B |
| pH | = | | std units | self | continuous | 08/07/2002 | 1B |
| pH | = | | std units | self | continuous | 08/08/2002 | 1B |
| pH | = | | std units | self | continuous | 08/09/2002 | 1B |
| pH | = | | std units | self | continuous | 08/10/2002 | 1B |
| pH | = | | std units | self | continuous | 08/11/2002 | 1B |
| pH | = | | std units | self | continuous | 08/12/2002 | 1B |
| pH | = | | std units | self | continuous | 08/13/2002 | 1B |
| pH | = | | std units | self | continuous | 08/14/2002 | 1B |
| pH | = | | std units | self | continuous | 08/15/2002 | 1B |
| pH | = | | std units | self | continuous | 08/16/2002 | 1B |
| pH | = | | std units | self | continuous | 08/17/2002 | 1B |
| pH | = | | std units | self | continuous | 08/18/2002 | 1B |
| pH | = | | std units | self | continuous | 08/19/2002 | 1B |
| pH | = | | std units | self | continuous | 08/20/2002 | 1B |
| pH | = | | std units | self | continuous | 08/21/2002 | 1B |
| pH | = | | std units | self | continuous | 08/22/2002 | 1B |
| pH | = | | std units | self | continuous | 08/23/2002 | 1B |
| pH | = | | std units | self | continuous | 08/24/2002 | 1B |
| pH | = | | std units | self | continuous | 08/25/2002 | 1B |
| pH | = | | std units | self | continuous | 08/26/2002 | 1B |
| pH | = | | std units | self | continuous | 08/27/2002 | 1B |
| pH | = | | std units | self | continuous | 08/28/2002 | 1B |
| pH | = | | std units | self | continuous | 08/29/2002 | 1B |
| pH | = | | std units | self | continuous | 08/30/2002 | 1B |
| pH | = | | std units | self | continuous | 08/31/2002 | 1B |
| pH | = | | std units | self | continuous | 09/01/2002 | 1B |
| pH | = | | std units | self | continuous | 09/02/2002 | 1B |
| pH | = | | std units | self | continuous | 09/03/2002 | 1B |
| pH | = | | std units | self | continuous | 09/04/2002 | 1B |
| pH | = | | std units | self | continuous | 09/05/2002 | 1B |
| pH | = | | std units | self | continuous | 09/06/2002 | 1B |
| pH | = | | std units | self | continuous | 09/07/2002 | 1B |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 09/08/2002 | 1B |
| pH | = | | std units | self | continuous | 09/09/2002 | 1B |
| pH | = | | std units | self | continuous | 09/10/2002 | 1B |
| pH | = | | std units | self | continuous | 09/11/2002 | 1B |
| pH | = | 9.3 | std units | city | grab | 09/11/2002 9:53 AM | 1B |
| pH | = | | std units | self | continuous | 09/12/2002 | 1B |
| pH | = | | std units | self | continuous | 09/13/2002 | 1B |
| pH | = | | std units | self | continuous | 09/14/2002 | 1B |
| pH | = | | std units | self | continuous | 09/15/2002 | 1B |
| pH | = | | std units | self | continuous | 09/16/2002 | 1B |
| pH | = | | std units | self | continuous | 09/17/2002 | 1B |
| pH | = | | std units | self | continuous | 09/18/2002 | 1B |
| pH | = | | std units | self | continuous | 09/19/2002 | 1B |
| pH | = | | std units | self | continuous | 09/20/2002 | 1B |
| pH | = | | std units | self | continuous | 09/21/2002 | 1B |
| pH | = | | std units | self | continuous | 09/22/2002 | 1B |
| pH | = | | std units | self | continuous | 09/23/2002 | 1B |
| pH | = | | std units | self | continuous | 09/24/2002 | 1B |
| pH | = | | std units | self | continuous | 09/25/2002 | 1B |
| pH | = | | std units | self | continuous | 09/26/2002 | 1B |
| pH | = | | std units | self | continuous | 09/27/2002 | 1B |
| pH | = | | std units | self | continuous | 09/28/2002 | 1B |
| pH | = | | std units | self | continuous | 09/29/2002 | 1B |
| pH | = | | std units | self | continuous | 09/30/2002 | 1B |
| pH | = | | std units | self | continuous | 10/01/2002 | 1B |
| pH | = | | std units | self | continuous | 10/02/2002 | 1B |
| pH | = | | std units | self | continuous | 10/03/2002 | 1B |
| pH | = | | std units | self | continuous | 10/04/2002 | 1B |
| pH | = | | std units | self | continuous | 10/05/2002 | 1B |
| pH | = | | std units | self | continuous | 10/06/2002 | 1B |
| pH | = | | std units | self | continuous | 10/07/2002 | 1B |
| pH | = | | std units | self | continuous | 10/08/2002 | 1B |
| pH | = | | std units | self | continuous | 10/09/2002 | 1B |
| pH | = | | std units | self | continuous | 10/10/2002 | 1B |
| pH | = | | std units | self | continuous | 10/11/2002 | 1B |
| pH | = | | std units | self | continuous | 10/12/2002 | 1B |
| pH | = | | std units | self | continuous | 10/13/2002 | 1B |
| pH | = | | std units | self | continuous | 10/14/2002 | 1B |
| pH | = | | std units | self | continuous | 10/15/2002 | 1B |
| pH | = | | std units | self | continuous | 10/16/2002 | 1B |
| pH | = | | std units | self | continuous | 10/17/2002 | 1B |
| pH | = | | std units | self | continuous | 10/18/2002 | 1B |
| pH | = | | std units | self | continuous | 10/19/2002 | 1B |
| pH | = | | std units | self | continuous | 10/20/2002 | 1B |
| pH | = | | std units | self | continuous | 10/21/2002 | 1B |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 10/22/2002 | 1B |
| pH | = | | std units | self | continuous | 10/23/2002 | 1B |
| pH | = | | std units | self | continuous | 10/24/2002 | 1B |
| pH | = | | std units | self | continuous | 10/25/2002 | 1B |
| pH | = | | std units | self | continuous | 10/26/2002 | 1B |
| pH | = | | std units | self | continuous | 10/27/2002 | 1B |
| pH | = | | std units | self | continuous | 10/28/2002 | 1B |
| pH | = | | std units | self | continuous | 10/29/2002 | 1B |
| pH | = | | std units | self | continuous | 10/30/2002 | 1B |
| pH | = | | std units | self | continuous | 10/31/2002 | 1B |
| pH | = | | std units | self | continuous | 11/01/2002 | 1B |
| pH | = | | std units | self | continuous | 11/02/2002 | 1B |
| pH | = | | std units | self | continuous | 11/03/2002 | 1B |
| pH | = | | std units | self | continuous | 11/04/2002 | 1B |
| pH | = | | std units | self | continuous | 11/05/2002 | 1B |
| pH | = | | std units | self | continuous | 11/06/2002 | 1B |
| pH | = | | std units | self | continuous | 11/07/2002 | 1B |
| pH | = | | std units | self | continuous | 11/08/2002 | 1B |
| pH | = | | std units | self | continuous | 11/09/2002 | 1B |
| pH | = | | std units | self | continuous | 11/10/2002 | 1B |
| pH | = | | std units | self | continuous | 11/11/2002 | 1B |
| pH | = | | std units | self | continuous | 11/12/2002 | 1B |
| pH | = | | std units | self | continuous | 11/13/2002 | 1B |
| pH | = | | std units | self | continuous | 11/14/2002 | 1B |
| pH | = | | std units | self | continuous | 11/15/2002 | 1B |
| pH | = | | std units | self | continuous | 11/16/2002 | 1B |
| pH | = | | std units | self | continuous | 11/17/2002 | 1B |
| pH | = | | std units | self | continuous | 11/18/2002 | 1B |
| pH | = | 9.6 | std units | city | grab | 11/18/2002 11:57 AM | 1B |
| pH | = | | std units | self | continuous | 11/19/2002 | 1B |
| pH | = | | std units | self | continuous | 11/20/2002 | 1B |
| pH | = | | std units | self | continuous | 11/21/2002 | 1B |
| pH | = | | std units | self | continuous | 11/22/2002 | 1B |
| pH | = | | std units | self | continuous | 11/23/2002 | 1B |
| pH | = | | std units | self | continuous | 11/24/2002 | 1B |
| pH | = | | std units | self | continuous | 11/25/2002 | 1B |
| pH | = | | std units | self | continuous | 11/26/2002 | 1B |
| pH | = | | std units | self | continuous | 11/27/2002 | 1B |
| pH | = | | std units | self | continuous | 11/28/2002 | 1B |
| pH | = | | std units | self | continuous | 11/29/2002 | 1B |
| pH | = | | std units | self | continuous | 11/30/2002 | 1B |
| pH | = | | std units | self | continuous | 12/01/2002 | 1B |
| pH | = | | std units | self | continuous | 12/02/2002 | 1B |
| pH | = | | std units | self | continuous | 12/03/2002 | 1B |
| pH | = | | std units | self | continuous | 12/04/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 12/05/2002 | 1B |
| pH | = | | std units | self | continuous | 12/06/2002 | 1B |
| pH | = | | std units | self | continuous | 12/07/2002 | 1B |
| pH | = | | std units | self | continuous | 12/08/2002 | 1B |
| pH | = | | std units | self | continuous | 12/09/2002 | 1B |
| pH | = | | std units | self | continuous | 12/10/2002 | 1B |
| pH | = | | std units | self | continuous | 12/11/2002 | 1B |
| pH | = | | std units | self | continuous | 12/12/2002 | 1B |
| pH | = | | std units | self | continuous | 12/13/2002 | 1B |
| pH | = | | std units | self | continuous | 12/14/2002 | 1B |
| pH | = | | std units | self | continuous | 12/15/2002 | 1B |
| pH | = | | std units | self | continuous | 12/16/2002 | 1B |
| pH | = | | std units | self | continuous | 12/17/2002 | 1B |
| pH | = | | std units | self | continuous | 12/18/2002 | 1B |
| pH | = | | std units | self | continuous | 12/19/2002 | 1B |
| pH | = | | std units | self | continuous | 12/20/2002 | 1B |
| pH | = | | std units | self | continuous | 12/21/2002 | 1B |
| pH | = | | std units | self | continuous | 12/22/2002 | 1B |
| pH | = | | std units | self | continuous | 12/23/2002 | 1B |
| pH | = | | std units | self | continuous | 12/24/2002 | 1B |
| pH | = | | std units | self | continuous | 12/25/2002 | 1B |
| pH | = | | std units | self | continuous | 12/26/2002 | 1B |
| pH | = | | std units | self | continuous | 12/27/2002 | 1B |
| pH | = | | std units | self | continuous | 12/28/2002 | 1B |
| pH | = | | std units | self | continuous | 12/29/2002 | 1B |
| pH | = | | std units | self | continuous | 12/30/2002 | 1B |
| pH | = | | std units | self | continuous | 12/31/2002 | 1B |
| pH | = | | std units | self | continuous | 01/01/2003 | 1B |
| **pH** | | | **Minimum** | **7.2000 std units** | | **Count 370** | |
| | | | **Maximum** | **9.6000 std units** | | | |
| phenacetin | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **phenacetin** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| phenanthrene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| phenanthrene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| phenanthrene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| phenanthrene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **phenanthrene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| phenobarbital | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **phenobarbital** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| phenol | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| phenol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **phenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| phenols - total (epa 420) | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| phenols - total (epa 420) | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| **phenols - total (epa 420)** | | | **Minimum** | **0.0025 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0025 mg/L** | | | |
| | | | **Maximum** | **0.0025 mg/L** | | | |
| phorate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **phorate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| phosalone | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **phosalone** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| phosmet | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **phosmet** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| phosphamidon | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **phosphamidon** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| phthalic anhydride | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **phthalic anhydride** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| piperonyl sulfoxide | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **piperonyl sulfoxide** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| p-isopropyltoluene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| **p-isopropyltoluene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| pronamide | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pronamide** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| propionitrile | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **propionitrile** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| propylthiouracil | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **propylthiouracil** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| pyrene | < | 0.005 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| pyrene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| pyrene | < | 0.005 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| pyrene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pyrene** | | | **Minimum** | **0.0025 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| pyridine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **pyridine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| resorcinol | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **resorcinol** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| safrole | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **safrole** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| sec-butylbenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| sec-butylbenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **sec-butylbenzene** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| solids - total | = | 545 | mg/L | city | composite | 01/22/2002 12:57 PM | 1B |
| solids - total | = | 339 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| solids - total | = | 337 | mg/L | city | composite | 09/11/2002 9:53 AM | 1B |
| solids - total | = | 465 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| **solids - total** | | **Minimum** | | **337.0000 mg/L** | | **Count 4** | |
| | | **Average** | | **421.5000 mg/L** | | | |
| | | **Maximum** | | **545.0000 mg/L** | | | |
| solids - total dissolved | = | 430 | mg/L | city | composite | 01/22/2002 12:57 PM | 1B |
| solids - total dissolved | = | 300 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| solids - total dissolved | = | 310 | mg/L | city | composite | 09/11/2002 9:53 AM | 1B |
| solids - total dissolved | = | 370 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| **solids - total dissolved** | | **Minimum** | | **300.0000 mg/L** | | **Count 4** | |
| | | **Average** | | **352.5000 mg/L** | | | |
| | | **Maximum** | | **430.0000 mg/L** | | | |
| solids - total suspended | = | 117 | mg/L | city | composite | 01/22/2002 12:57 PM | 1B |
| solids - total suspended | = | 220 | mg/L | self | grab | 03/07/2002 10:00 AM | 1B |
| solids - total suspended | = | 208 | mg/L | self | grab | 03/14/2002 9:33 AM | 1B |
| solids - total suspended | = | 956 | mg/L | self | grab | 03/21/2002 1:00 PM | 1B |
| solids - total suspended | = | 310 | mg/L | self | composite | 06/15/2002 | 1B |
| solids - total suspended | = | 42 | mg/L | city | composite | 06/27/2002 8:42 AM | 1B |
| solids - total suspended | = | 64.5 | mg/L | self | composite | 09/05/2002 7:30 AM | 1B |
| solids - total suspended | = | 25 | mg/L | city | composite | 09/11/2002 9:53 AM | 1B |
| solids - total suspended | = | 94 | mg/L | city | composite | 11/18/2002 11:57 AM | 1B |
| solids - total suspended | = | 107 | mg/L | self | grab | 12/05/2002 11:00 AM | 1B |
| solids - total suspended | = | 82 | mg/L | self | grab | 12/12/2002 10:03 AM | 1B |
| solids - total suspended | = | 32.5 | mg/L | self | grab | 12/19/2002 10:00 AM | 1B |
| solids - total suspended | = | 42.8 | mg/L | self | grab | 12/26/2002 10:20 AM | 1B |
| **solids - total suspended** | | **Minimum** | | **25.0000 mg/L** | | **Count 13** | |
| | | **Average** | | **176.9846 mg/L** | | | |
| | | **Maximum** | | **956.0000 mg/L** | | | |
| styrene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |

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Org Id 1592

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| styrene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| styrene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **styrene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| sulfallate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **sulfallate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| terbufos | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **terbufos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| tert-butylbenzene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| tert-butylbenzene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **tert-butylbenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| tetrachloroethene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| tetrachloroethene | < | 0.003 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| tetrachloroethene | < | 0.003 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| tetrachloroethene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| tetrachloroethene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **tetrachloroethene** | | **Minimum** | **0.0015 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0036 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| tetrachlorvinphos | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **tetrachlorvinphos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| tetraethyl pyrophosphate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **tetraethyl pyrophosphate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| thionazine | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **thionazine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| thiophenol (benzenethiol) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **thiophenol (benzenethiol)** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| toluene | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| toluene | < | 0.003 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| toluene | = | 0.0214 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| toluene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| toluene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **toluene** | | **Minimum** | **0.0015 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0076 mg/L** | | | | |
| | | **Maximum** | **0.0214 mg/L** | | | | |
| toluene diisocyanate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **toluene diisocyanate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| toxaphene | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| toxaphene | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **toxaphene** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| trichloroethene (tce) | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| trichloroethene (tce) | < | 0.002 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| trichloroethene (tce) | < | 0.002 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| trichloroethene (tce) | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| trichloroethene (tce) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **trichloroethene (tce)** | | **Minimum** | **0.0010 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0034 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| trichlorofluoromethane (freon-11) | < | 0.005 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| trichlorofluoromethane (freon-11) | < | 0.005 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **trichlorofluoromethane (freon-11)** | | **Minimum** | **0.0025 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0040 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| trifluraline | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **trifluraline** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| trimethyl phosphate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **trimethyl phosphate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| tri-p-tolyl phosphate(h) | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **tri-p-tolyl phosphate(h)** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| tris(2,3-dibromopropyl) phosphate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **tris(2,3-dibromopropyl) phosphate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| vinyl acetate | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **vinyl acetate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| vinyl chloride | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| vinyl chloride | < | 0.005 | mg/L | city | grab | 06/27/2002 8:42 AM | 1B |
| vinyl chloride | < | 0.005 | mg/L | city | grab | 09/11/2002 9:53 AM | 1B |
| vinyl chloride | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| vinyl chloride | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **vinyl chloride** | | **Minimum** | **0.0025 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0040 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| xylene, m- | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| xylene, m- | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **xylene, m-** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| xylene, m,p- | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| **xylene, m,p-** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| xylene, o- | < | 0.01 | mg/L | self | grab | 03/07/2002 8:30 AM | 1B |
| xylene, o- | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| xylene, o- | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **xylene, o-** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| xylene, p- | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| xylene, p- | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **xylene, p-** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| xylenes, total | < | 0.01 | mg/L | self | certified | 09/30/2002 | 1B |
| xylenes, total | < | 0.01 | mg/L | self | grab | 12/05/2002 6:20 AM | 1B |
| **xylenes, total** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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CITY OF PORTLAND
ENVIRONMENTAL SERVICES

Water Pollution Control Laboratory
6543 N. Burlington Ave., Portland, Oregon 97203-5452
(503) 823-5600

January 8, 2001

Mr. Thomas C. McCue
Wacker Siltronic Corporation
7200 NW Front Avenue
PO Box 83180
Portland, OR 97283-0180

RE: Periodic Self-Monitoring Report Forms

Dear Mr. McCue:

I am sending a set of yearly self-monitoring report forms that reflect Wacker Siltronic's self-monitoring requirements for 2001. I have dropped the quarterly monitoring requirement for molybdenum based on the last two years of data that showed no need to continue said monitoring. Reference the dates on the top of the forms to ensure on-time submittal of the appropriate sample results

I have also enclosed the sampling data collected from your facility during the last year. This data is provided to assist you in maintaining historical information for pollutants present in your facility's wastewater discharges. This information should help to identify any compliance issues. The Industrial Source Control Division maintains sampling data from both City and self-monitoring samples. Compare your self-monitoring results to the City monitoring results, to verify that this information is correct.

If you have any questions about the enclosed forms, call me at 823-5537. Thank you for your continued cooperation.

Sincerely,

Timothy P. Dean, CHMM
Permit Manager

cc: M. Santana, BES

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SCOEPA00036010

CITY OF PORTLAND
ENVIRONMENTAL SERVICES

Water Pollution Control Laboratory
6543 N. Burlington Ave., Portland, Oregon 97203-5452
(503) 823-5600

January 25, 2002

Mr. James Claxton
Wacker Siltronic Corporation
7200 NW Front Avenue
Mail Stop 30
Portland, OR 97283-0180

RE: 2001 Analytical Data.

Dear Mr. Claxton;

Enclosed is the sampling data collected from your facility during 2001. Use this data to assist you in maintaining historical information for pollutants present in your facility's wastewater discharge. This information will also help to identify any compliance issues.

The Industrial Source Control Division maintains data from both City and self-monitoring. Please take this opportunity to compare self-monitoring results to City monitoring results, as well as to verify the analytical information contained within the report with your records.

As always if you have any questions about this report or your facility's wastewater discharge permit, contact me at (503) 823-5537. We thank you for doing your part to help protect water quality and the environment.

Respectfully,

Timothy P. Dean
PPS/BES Permit Manager.

SCOEPA00036011

# Historical Analytical Report for 01/01/2001 - 01/01/2002

Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **1200Z**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| copper | = | 0.05 | mg/L | self | grab | 04/20/2001 10:15 AM | 01 |
| copper | < | 0.05 | mg/L | self | grab | 04/20/2001 10:30 AM | 02 |
| copper | < | 0.03 | mg/L | self | grab | 04/20/2001 10:45 AM | 03 |
| **copper** | | **Minimum** | | **0.0150 mg/L** | | **Count 3** | |
| | | **Average** | | **0.0300 mg/L** | | | |
| | | **Maximum** | | **0.0500 mg/L** | | | |
| lead | = | 0.007 | mg/L | self | grab | 04/20/2001 10:15 AM | 01 |
| lead | < | 0.005 | mg/L | self | grab | 04/20/2001 10:30 AM | 02 |
| lead | < | 0.005 | mg/L | self | grab | 04/20/2001 10:45 AM | 03 |
| **lead** | | **Minimum** | | **0.0025 mg/L** | | **Count 3** | |
| | | **Average** | | **0.0040 mg/L** | | | |
| | | **Maximum** | | **0.0070 mg/L** | | | |
| oil/grease - total | < | 3 | mg/L | self | grab | 04/20/2001 10:15 AM | 01 |
| oil/grease - total | < | 3 | mg/L | self | grab | 04/20/2001 10:30 AM | 02 |
| oil/grease - total | < | 3 | mg/L | self | grab | 04/20/2001 10:45 AM | 03 |
| **oil/grease - total** | | **Minimum** | | **1.5000 mg/L** | | **Count 3** | |
| | | **Average** | | **1.5000 mg/L** | | | |
| | | **Maximum** | | **1.5000 mg/L** | | | |
| pH | = | 6.4 | std units | self | grab | 04/20/2001 10:15 AM | 01 |
| pH | = | 6.3 | std units | self | grab | 04/20/2001 10:30 AM | 02 |
| pH | = | 6.4 | std units | self | grab | 04/20/2001 10:45 AM | 03 |
| **pH** | | **Minimum** | | **6.3000 std units** | | **Count 3** | |
| | | **Maximum** | | **6.4000 std units** | | | |
| solids - total suspended | = | 207.25 | mg/L | self | grab | 04/20/2001 10:15 AM | 01 |
| solids - total suspended | = | 57.5 | mg/L | self | grab | 04/30/2001 | 01 |
| solids - total suspended | = | 19 | mg/L | self | grab | 04/20/2001 10:30 AM | 02 |
| solids - total suspended | = | 10 | mg/L | self | grab | 04/20/2001 10:45 AM | 03 |
| **solids - total suspended** | | **Minimum** | | **10.0000 mg/L** | | **Count 4** | |
| | | **Average** | | **73.4375 mg/L** | | | |
| | | **Maximum** | | **207.2500 mg/L** | | | |
| zinc | = | 0.39 | mg/L | self | grab | 04/20/2001 10:15 AM | 01 |
| zinc | = | 0.29 | mg/L | self | grab | 04/20/2001 10:30 AM | 02 |
| zinc | = | 0.26 | mg/L | self | grab | 04/20/2001 10:45 AM | 03 |
| **zinc** | | **Minimum** | | **0.2600 mg/L** | | **Count 3** | |
| | | **Average** | | **0.3133 mg/L** | | | |
| | | **Maximum** | | **0.3900 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 0,0,0-triethylphosphorothioate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **0,0,0-triethylphosphorothioate** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.002 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.004 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| 1,1,1,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,1,1,2-tetrachloroethane** | | **Minimum** | | **0.0010 mg/L** | | **Count 11** | |
| | | **Average** | | **0.0044 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1,1-trichloroethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,1,1-trichloroethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,1,1-trichloroethane | < | 0.003 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,1,1-trichloroethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,1,1-trichloroethane | < | 0.006 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,1,1-trichloroethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,1,1-trichloroethane** | | **Minimum** | | **0.0015 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0041 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1,2,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.002 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.004 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,1,2,2-tetrachloroethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,1,2,2-tetrachloroethane** | | **Minimum** | | **0.0010 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0038 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1,2-trichloroethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,1,2-trichloroethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,1,2-trichloroethane | < | 0.001 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,1,2-trichloroethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,1,2-trichloroethane | < | 0.002 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,1,2-trichloroethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,1,2-trichloroethane** | | **Minimum** | | **0.0005 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0036 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1-dichloroethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,1-dichloroethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,1-dichloroethane | < | 0.004 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,1-dichloroethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,1-dichloroethane | < | 0.008 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,1-dichloroethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,1-dichloroethane** | | **Minimum** | | **0.0020 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0043 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1-dichloroethene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,1-dichloroethene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,1-dichloroethene | < | 0.005 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,1-dichloroethene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,1-dichloroethene | < | 0.01 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,1-dichloroethene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,1-dichloroethene** | | **Minimum** | | **0.0025 mg/L** | | **Count 6** | |
| | | **Average** | | **0.0046 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,1-dichloropropene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,1-dichloropropene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,1-dichloropropene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,1-dichloropropene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,1-dichloropropene** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,2,3-trichlorobenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,2,3-trichlorobenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,2,3-trichlorobenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,2,3-trichlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2,3-trichlorobenzene** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 1,2,3-trichloropropane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,2,3-trichloropropane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,2,3-trichloropropane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,2,3-trichloropropane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2,3-trichloropropane** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2,4,5-tetrachlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2,4,5-tetrachlorobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| 1,2,4-trichlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2,4-trichlorobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 7** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2,4-trimethylbenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,2,4-trimethylbenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,2,4-trimethylbenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,2,4-trimethylbenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2,4-trimethylbenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| 1,2-dibromo-3-chloropropane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2-dibromo-3-chloropropane** | | **Minimum** | **0.0050 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,2-dibromoethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2-dibromoethane** | | | **Minimum** | **0.0050 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,2-dichlorobenzene | < | 0.002 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,2-dichlorobenzene | < | 0.004 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| 1,2-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2-dichlorobenzene** | | | **Minimum** | **0.0010 mg/L** | | **Count 9** | |
| | | | **Average** | **0.0042 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichloroethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,2-dichloroethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,2-dichloroethane | < | 0.001 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,2-dichloroethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,2-dichloroethane | < | 0.002 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,2-dichloroethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2-dichloroethane** | | | **Minimum** | **0.0005 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0036 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichloroethene (cis) | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,2-dichloroethene (cis) | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,2-dichloroethene (cis) | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,2-dichloroethene (cis) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2-dichloroethene (cis)** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.005 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,2-dichloroethene (trans) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2-dichloroethene (trans)** | | **Minimum** | **0.0025 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0046 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2-dichloropropane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,2-dichloropropane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,2-dichloropropane | < | 0.003 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,2-dichloropropane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,2-dichloropropane | < | 0.006 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,2-dichloropropane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2-dichloropropane** | | **Minimum** | **0.0015 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0041 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2-dinitrobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2-dinitrobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,2-diphenylhydrazine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,2-diphenylhydrazine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,3,5-trimethylbenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,3,5-trimethylbenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,3,5-trimethylbenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,3,5-trimethylbenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,3,5-trimethylbenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,3,5-trinitrobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,3,5-trinitrobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,3-dichlorobenzene | < | 0.002 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,3-dichlorobenzene | < | 0.004 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| 1,3-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,3-dichlorobenzene** | | | **Minimum** | **0.0010 mg/L** | | **Count 9** | |
| | | | **Average** | **0.0042 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,3-dichloropropane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,3-dichloropropane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,3-dichloropropane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,3-dichloropropane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,3-dichloropropane** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,3-dichloropropene (cis) | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.001 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,3-dichloropropene (cis) | < | 0.002 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,3-dichloropropene (cis) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,3-dichloropropene (cis)** | | | **Minimum** | **0.0005 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0036 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,3-dichloropropene (trans) | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.001 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,3-dichloropropene (trans) | < | 0.002 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,3-dichloropropene (trans) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,3-dichloropropene (trans)** | | | **Minimum** | **0.0005 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0036 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,3-dinitrobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,3-dinitrobenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,4-dichloro-2-butene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,4-dichloro-2-butene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1,4-dichloro-2-butene (cis) | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1,4-dichloro-2-butene (cis) | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,4-dichloro-2-butene (cis) | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,4-dichloro-2-butene (cis) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,4-dichloro-2-butene (cis)** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,4-dichloro-2-butene (trans) | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,4-dichloro-2-butene (trans) | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,4-dichloro-2-butene (trans) | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,4-dichloro-2-butene (trans) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,4-dichloro-2-butene (trans)** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 1,4-dichlorobenzene | < | 0.001 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 1,4-dichlorobenzene | < | 0.002 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| 1,4-dichlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,4-dichlorobenzene** | | **Minimum** | **0.0005 mg/L** | | | **Count 9** | |
| | | **Average** | **0.0041 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,4-dinitrobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| 1,4-dinitrobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,4-dinitrobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,4-naphthoquinone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,4-naphthoquinone** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 1,4-phenylenediamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1,4-phenylenediamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 1-acetyl-2-thiourea | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1-acetyl-2-thiourea** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1-chloronaphthalene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1-chloronaphthalene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 1-naphthylamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **1-naphthylamine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2,2',3,3',4,4',6-heptachlorobiphenyl | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,2',3,3',4,4',6-heptachlorobiphenyl** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2,2-dichloropropane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 2,2-dichloropropane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 2,2-dichloropropane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 2,2-dichloropropane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,2-dichloropropane** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2,3,4,6-tetrachlorophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,3,4,6-tetrachlorophenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2,4,5-t | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,4,5-t** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2,4,5-tp (silvex) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,4,5-tp (silvex)** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 2,4,5-trichlorophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,4,5-trichlorophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,4,5-trimethylaniline | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,4,5-trimethylaniline** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,4,6-trichlorophenol | < | 0.04 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 2,4,6-trichlorophenol | < | 0.04 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 2,4,6-trichlorophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,4,6-trichlorophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0150 mg/L** | | | | |
| | | **Maximum** | **0.0200 mg/L** | | | | |
| 2,4-diaminotoluene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,4-diaminotoluene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,4-dichlorophenol | < | 0.02 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 2,4-dichlorophenol | < | 0.02 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 2,4-dichlorophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,4-dichlorophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0083 mg/L** | | | | |
| | | **Maximum** | **0.0100 mg/L** | | | | |
| 2,4-dimethylphenol | < | 0.02 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 2,4-dimethylphenol | < | 0.02 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 2,4-dimethylphenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,4-dimethylphenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0083 mg/L** | | | | |
| | | **Maximum** | **0.0100 mg/L** | | | | |
| 2,4-dinitrophenol | < | 0.04 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 2,4-dinitrophenol | < | 0.04 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 2,4-dinitrophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,4-dinitrophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0150 mg/L** | | | | |
| | | **Maximum** | **0.0200 mg/L** | | | | |
| 2,4-dinitrotoluene | < | 0.02 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 2,4-dinitrotoluene | < | 0.02 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 2,4-dinitrotoluene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| 2,4-dinitrotoluene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,4-dinitrotoluene** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0075 mg/L** | | | | |
| | | **Maximum** | **0.0100 mg/L** | | | | |
| 2,6-dichlorophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| 2,6-dichlorophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,6-dichlorophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2,6-dinitrotoluene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 2,6-dinitrotoluene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 2,6-dinitrotoluene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2,6-dinitrotoluene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2-acetylaminofluorene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-acetylaminofluorene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2-aminoanthraquinone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-aminoanthraquinone** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2-butanone | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 2-butanone | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 2-butanone | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 2-butanone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-butanone** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2-chloroethylvinyl ether | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 2-chloroethylvinyl ether | < | 0.025 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| 2-chloroethylvinyl ether | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 2-chloroethylvinyl ether | < | 0.05 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| 2-chloroethylvinyl ether | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 2-chloroethylvinyl ether | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-chloroethylvinyl ether** | | **Minimum** | **0.0050 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0096 mg/L** | | | | |
| | | **Maximum** | **0.0250 mg/L** | | | | |
| 2-chloronaphthalene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 2-chloronaphthalene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 2-chloronaphthalene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-chloronaphthalene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2-chlorophenol | < | 0.02 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 2-chlorophenol | < | 0.02 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 2-chlorophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-chlorophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0083 mg/L** | | | | |
| | | **Maximum** | **0.0100 mg/L** | | | | |
| 2-chlorotoluene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 2-chlorotoluene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 2-chlorotoluene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 2-chlorotoluene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-chlorotoluene** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2-cyclohexyl-4,6-dinitrophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-cyclohexyl-4,6-dinitrophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2-hexanone | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 2-hexanone | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 2-hexanone | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 2-hexanone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-hexanone** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 2-methyl-4,6-dinitrophenol | < | 0.02 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 2-methyl-4,6-dinitrophenol | < | 0.02 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 2-methyl-4,6-dinitrophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-methyl-4,6-dinitrophenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0083 mg/L** | | | |
| | | | **Maximum** | **0.0100 mg/L** | | | |
| 2-methylnaphthalene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-methylnaphthalene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-methylphenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-methylphenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-naphthylamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-naphthylamine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-nitroaniline | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-nitroaniline** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 2-nitrophenol | < | 0.02 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 2-nitrophenol | < | 0.02 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 2-nitrophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-nitrophenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0083 mg/L** | | | |
| | | | **Maximum** | **0.0100 mg/L** | | | |
| 2-picoline | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **2-picoline** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| 3- & 4-methylphenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **3- & 4-methylphenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 3-(chloromethyl) pyridine hydrochloride | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **3-(chloromethyl) pyridine hydrochloride** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3,3'-dichlorobenzidine | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 3,3'-dichlorobenzidine | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 3,3'-dichlorobenzidine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **3,3'-dichlorobenzidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3,3'-dimethoxybenzidine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **3,3'-dimethoxybenzidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3,3'-dimethylbenzidine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **3,3'-dimethylbenzidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3-methylcholanthrene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **3-methylcholanthrene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3-methylphenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **3-methylphenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 3-nitroaniline | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **3-nitroaniline** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4,4'-ddd (p,p'-tde) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4,4'-ddd (p,p'-tde)** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 4,4'-dde (p,p'-ddx) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4,4'-dde (p,p'-ddx)** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4,4'-ddt | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4,4'-ddt** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4,4'methylenebis(2-chloroaniline) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4,4'methylenebis(2-chloroaniline)** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4,4'-oxydianiline | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4,4'-oxydianiline** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4,6-dinitro-2-methylphenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4,6-dinitro-2-methylphenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4-aminobiphenyl | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-aminobiphenyl** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4-bromophenyl phenyl ether | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 4-bromophenyl phenyl ether | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 4-bromophenyl phenyl ether | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-bromophenyl phenyl ether** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4-chloro-3-methylphenol | < | 0.02 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 4-chloro-3-methylphenol | < | 0.02 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 4-chloro-3-methylphenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-chloro-3-methylphenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0083 mg/L** | | | | |
| | | **Maximum** | **0.0100 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 4-chloroaniline | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-chloroaniline** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 4-chlorophenyl phenyl ether | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 4-chlorophenyl phenyl ether | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 4-chlorophenyl phenyl ether | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-chlorophenyl phenyl ether** | | **Minimum** | | **0.0050 mg/L** | | **Count 3** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 4-chlorotoluene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 4-chlorotoluene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 4-chlorotoluene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 4-chlorotoluene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-chlorotoluene** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 4-isopropyltoluene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 4-isopropyltoluene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 4-isopropyltoluene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 4-isopropyltoluene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-isopropyltoluene** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 4-methyl-2-pentanone | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| 4-methyl-2-pentanone | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| 4-methyl-2-pentanone | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| 4-methyl-2-pentanone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-methyl-2-pentanone** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| 4-methylphenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-methylphenol** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 4-nitroaniline | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-nitroaniline** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4-nitrobiphenyl | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-nitrobiphenyl** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 4-nitrophenol | < | 0.04 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| 4-nitrophenol | < | 0.04 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| 4-nitrophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **4-nitrophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0150 mg/L** | | | | |
| | | **Maximum** | **0.0200 mg/L** | | | | |
| 5,5-diphenylhydantoin | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **5,5-diphenylhydantoin** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 5-chloro-2-methylaniline | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **5-chloro-2-methylaniline** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 5-nitroacenaphthene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **5-nitroacenaphthene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 5-nitro-o-anisidine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **5-nitro-o-anisidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| 5-nitro-o-toluidine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **5-nitro-o-toluidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages

Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| 7,12-dimethylbenz[a]anthracene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **7,12-dimethylbenz[a]anthracene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| acenaphthene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| acenaphthene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| acenaphthene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **acenaphthene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| acenaphthylene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| acenaphthylene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| acenaphthylene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **acenaphthylene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| acetone | = | 2.9 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| acetone | = | 8.6 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| acetone | = | 3.6 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| acetone | = | 3.6 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **acetone** | | **Minimum** | **2.9000 mg/L** | | | **Count 4** | |
| | | **Average** | **4.6750 mg/L** | | | | |
| | | **Maximum** | **8.6000 mg/L** | | | | |
| acetonitrile | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| acetonitrile | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| acetonitrile | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| acetonitrile | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **acetonitrile** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| acetophenone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **acetophenone** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| acrolein | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| acrolein | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| acrolein | < | 0.05 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| acrolein | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| acrolein | < | 0.1 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| acrolein | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **acrolein** | | **Minimum** | **0.0050 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0158 mg/L** | | | | |
| | | **Maximum** | **0.0500 mg/L** | | | | |
| acrylonitrile | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| acrylonitrile | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| acrylonitrile | < | 0.025 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| acrylonitrile | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| acrylonitrile | < | 0.05 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| acrylonitrile | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **acrylonitrile** | | **Minimum** | **0.0050 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0096 mg/L** | | | | |
| | | **Maximum** | **0.0250 mg/L** | | | | |
| alachlor | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **alachlor** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| aldrin | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **aldrin** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| allyl chloride | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **allyl chloride** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| alpha,alpha-dimethylphenethylamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **alpha,alpha-dimethylphenethylamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| aminoazobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **aminoazobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| anilazine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **anilazine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| aniline | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **aniline** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| anthracene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| anthracene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| anthracene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **anthracene** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| aramite | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| aramite | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **aramite** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| arsenic | < | 0.005 | mg/L | self | comp/split | 01/23/2001 9:34 AM | 1B |
| arsenic | = | 0.0013 | mg/L | city | comp/split | 01/23/2001 9:34 AM | 1B |
| arsenic | < | 0.005 | mg/L | self | composite | 03/01/2001 7:30 AM | 1B |
| arsenic | < | 0.05 | mg/L | self | composite | 06/07/2001 7:45 AM | 1B |
| arsenic | < | 0.001 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| arsenic | < | 0.005 | mg/L | self | composite | 09/06/2001 7:30 AM | 1B |
| arsenic | = | 0.0017 | mg/L | city | composite | 09/24/2001 12:01 PM | 1B |
| arsenic | = | 0.0014 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| arsenic | < | | mg/L | self | composite | 12/06/2001 7:30 AM | 1B |
| **arsenic** | | | **Minimum** | **0.0005 mg/L** | | **Count 9** | |
| | | | **Average** | **0.0047 mg/L** | | | |
| | | | **Maximum** | **0.0250 mg/L** | | | |
| azinphos methyl | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **azinphos methyl** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| azobenzene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| azobenzene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| **azobenzene** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| barban | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **barban** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| benzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| benzene | < | 0.002 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| benzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| benzene | < | 0.004 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| benzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **benzene** | | | **Minimum** | **0.0010 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzidine | < | 0.04 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| benzidine | < | 0.04 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| benzidine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **benzidine** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0150 mg/L** | | | |
| | | | **Maximum** | **0.0200 mg/L** | | | |
| benzo(a)anthracene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| benzo(a)anthracene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| benzo(a)anthracene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **benzo(a)anthracene** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzo(a)pyrene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| benzo(a)pyrene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| benzo(a)pyrene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **benzo(a)pyrene** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzo(b)fluoranthene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| benzo(b)fluoranthene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| benzo(b)fluoranthene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **benzo(b)fluoranthene** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| benzo(g,h,i)perylene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| benzo(g,h,i)perylene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| benzo(g,h,i)perylene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **benzo(g,h,i)perylene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| benzo(k)fluoranthene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| benzo(k)fluoranthene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| benzo(k)fluoranthene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **benzo(k)fluoranthene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| benzoic acid | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **benzoic acid** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| benzyl alcohol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| benzyl alcohol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **benzyl alcohol** | | **Minimum** | **0.0050 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| benzyl butyl phthalate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **benzyl butyl phthalate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| bhc, alpha | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bhc, alpha** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| bhc, beta | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bhc, beta** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| bhc, delta | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bhc, delta** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| bhc, gamma (lindane) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bhc, gamma (lindane)** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| bis(2-chloroethoxy) methane | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| bis(2-chloroethoxy) methane | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| bis(2-chloroethoxy) methane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bis(2-chloroethoxy) methane** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| bis(2-chloroethyl) ether | < | 0.04 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| bis(2-chloroethyl) ether | < | 0.04 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| bis(2-chloroethyl) ether | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bis(2-chloroethyl) ether** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0150 mg/L** | | | | |
| | | **Maximum** | **0.0200 mg/L** | | | | |
| bis(2-chloroisopropyl) ether | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| bis(2-chloroisopropyl) ether | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| bis(2-chloroisopropyl) ether | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bis(2-chloroisopropyl) ether** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| bis(2-ethylhexyl)phthalate | = | 0.333 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| bis(2-ethylhexyl)phthalate | = | 0.0458 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| bis(2-ethylhexyl)phthalate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bis(2-ethylhexyl)phthalate** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.1279 mg/L** | | | | |
| | | **Maximum** | **0.3330 mg/L** | | | | |
| bod - 5 | = | 79 | mg/L | city | composite | 09/24/2001 12:01 PM | 1B |
| bod - 5 | = | 138 | mg/L | city | composite | 09/25/2001 9:30 AM | 1B |
| bod - 5 | = | 123 | mg/L | city | composite | 09/26/2001 9:35 AM | 1B |
| bod - 5 | = | 112 | mg/L | city | composite | 09/27/2001 9:35 AM | 1B |
| bod - 5 | = | 178 | mg/L | city | composite | 09/28/2001 11:12 AM | 1B |
| bod - 5 | = | 230 | mg/L | city | composite | 09/29/2001 10:04 AM | 1B |
| bod - 5 | = | 207 | mg/L | city | composite | 09/30/2001 10:04 AM | 1B |
| **bod - 5** | | **Minimum** | **79.0000 mg/L** | | | **Count 7** | |
| | | **Average** | **152.4286 mg/L** | | | | |
| | | **Maximum** | **230.0000 mg/L** | | | | |
| bromobenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| bromobenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| bromobenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| bromobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bromobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| bromochloromethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| bromochloromethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| bromochloromethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| bromochloromethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bromochloromethane** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| bromodichloromethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| bromodichloromethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| bromodichloromethane | < | 0.002 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| bromodichloromethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| bromodichloromethane | < | 0.004 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| bromodichloromethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bromodichloromethane** | | **Minimum** | **0.0010 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| bromoform | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| bromoform | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| bromoform | < | 0.002 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| bromoform | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| bromoform | < | 0.004 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| bromoform | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bromoform** | | **Minimum** | **0.0010 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| bromomethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| bromomethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| bromomethane | < | 0.005 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| bromomethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| bromomethane | < | 0.01 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| bromomethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bromomethane** | | **Minimum** | **0.0025 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0046 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| bromoxynil | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **bromoxynil** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| butyl benzyl phthalate | < | 0.04 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| butyl benzyl phthalate | < | 0.04 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| butyl benzyl phthalate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **butyl benzyl phthalate** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0150 mg/L** | | | |
| | | | **Maximum** | **0.0200 mg/L** | | | |
| captafol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **captafol** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| captan | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **captan** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| carbaryl | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **carbaryl** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| carbazole | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **carbazole** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| carbofuran | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **carbofuran** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| carbon disulfide | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| carbon disulfide | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| carbon disulfide | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| carbon disulfide | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **carbon disulfide** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| carbon tetrachloride | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| carbon tetrachloride | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| carbon tetrachloride | < | 0.003 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| carbon tetrachloride | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| carbon tetrachloride | < | 0.006 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| carbon tetrachloride | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **carbon tetrachloride** | | | **Minimum** | **0.0015 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0041 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| carbophenothion | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **carbophenothion** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| chlordane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **chlordane** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| chlorfenvinphos | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **chlorfenvinphos** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| chlorobenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| chlorobenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| chlorobenzene | < | 0.002 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| chlorobenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| chlorobenzene | < | 0.004 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| chlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **chlorobenzene** | | | **Minimum** | **0.0010 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| chlorobenzilate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **chlorobenzilate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| chloroethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| chloroethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| chloroethane | < | 0.005 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| chloroethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| chloroethane | < | 0.01 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| chloroethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **chloroethane** | | **Minimum** | **0.0025 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0046 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| chloroform | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| chloroform | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| chloroform | < | 0.002 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| chloroform | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| chloroform | < | 0.004 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| chloroform | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **chloroform** | | **Minimum** | **0.0010 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0038 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| chloromethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| chloromethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| chloromethane | < | 0.005 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| chloromethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| chloromethane | < | 0.01 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| chloromethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **chloromethane** | | **Minimum** | **0.0025 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0046 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| chloroprene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **chloroprene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| chrysene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| chrysene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| chrysene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **chrysene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| cod | = | 1300 | mg/L | city | composite | 09/24/2001 12:01 PM | 1B |
| cod | = | 1200 | mg/L | city | composite | 09/25/2001 9:30 AM | 1B |
| cod | = | 1100 | mg/L | city | composite | 09/26/2001 9:35 AM | 1B |
| cod | = | 880 | mg/L | city | composite | 09/27/2001 9:35 AM | 1B |
| cod | = | 1100 | mg/L | city | composite | 09/28/2001 11:12 AM | 1B |
| cod | = | 1900 | mg/L | city | composite | 09/29/2001 10:04 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| cod | = | 1100 | mg/L | city | composite | 09/30/2001 10:04 AM | 1B |
| **cod** | | **Minimum** | | **880.0000 mg/L** | | **Count 7** | |
| | | **Average** | | **1,225.7143 mg/L** | | | |
| | | **Maximum** | | **1,900.0000 mg/L** | | | |
| coumaphos | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **coumaphos** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| crotoxyphos | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **crotoxyphos** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| dalapon | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dalapon** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| demeton-o | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **demeton-o** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| demeton-s | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **demeton-s** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| di(2-ethylhexyl)adipate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **di(2-ethylhexyl)adipate** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| diallate (trans or cis) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **diallate (trans or cis)** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| dibenzo(a,e)pyrene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dibenzo(a,e)pyrene** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| dibenzo(a,h)anthracene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| dibenzo(a,h)anthracene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| dibenzo(a,h)anthracene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dibenzo(a,h)anthracene** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dibenzo(a,j)acridine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dibenzo(a,j)acridine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dibenzofuran | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dibenzofuran** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dibromochloromethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| dibromochloromethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| dibromochloromethane | < | 0.001 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| dibromochloromethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| dibromochloromethane | < | 0.002 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| dibromochloromethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dibromochloromethane** | | | **Minimum** | **0.0005 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0036 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dibromomethane | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| dibromomethane | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| dibromomethane | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| dibromomethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| dibromomethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dibromomethane** | | | **Minimum** | **0.0050 mg/L** | | **Count 5** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dicamba | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dicamba** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| dichlone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dichlone** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dichlorodifluoromethane (freon-12) | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| dichlorodifluoromethane (freon-12) | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| dichlorodifluoromethane (freon-12) | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| dichlorodifluoromethane (freon-12) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dichlorodifluoromethane (freon-12)** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dichlorovos | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dichlorovos** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dicrotophos | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dicrotophos** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| dieldrin | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dieldrin** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| diethyl phthalate | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| diethyl phthalate | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| diethyl phthalate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **diethyl phthalate** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| diethyl sulfate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| diethyl sulfate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **diethyl sulfate** | | | **Minimum** | **0.0050 mg/L** | | **Count 2** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| diethylstilbesterol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **diethylstilbesterol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| dimethoate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dimethoate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| dimethyl phthalate | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| dimethyl phthalate | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| dimethyl phthalate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dimethyl phthalate** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| di-n-butyl phthalate | < | 0.05 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| di-n-butyl phthalate | < | 0.05 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| di-n-butyl phthalate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **di-n-butyl phthalate** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0183 mg/L** | | | | |
| | | **Maximum** | **0.0250 mg/L** | | | | |
| dinocap | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dinocap** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| di-n-octyl phthalate | < | 0.02 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| di-n-octyl phthalate | < | 0.02 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| di-n-octyl phthalate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **di-n-octyl phthalate** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0083 mg/L** | | | | |
| | | **Maximum** | **0.0100 mg/L** | | | | |
| dinoseb | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **dinoseb** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| diphenylamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **diphenylamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| disulfoton | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **disulfoton** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| endosulfan I | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **endosulfan I** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| endosulfan II | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **endosulfan II** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| endosulfan sulfate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **endosulfan sulfate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| endrin | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **endrin** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| endrin aldehyde | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **endrin aldehyde** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| endrin ketone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **endrin ketone** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| epn | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **epn** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| ethion | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **ethion** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| ethyl benzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| ethyl benzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| ethyl benzene | < | 0.003 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| ethyl benzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| ethyl benzene | < | 0.006 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| ethyl benzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **ethyl benzene** | | | **Minimum** | **0.0015 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0041 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| ethyl carbamate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **ethyl carbamate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| ethyl methacrylate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **ethyl methacrylate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| ethyl methanesulfonate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **ethyl methanesulfonate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| famphur | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **famphur** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| fensulfothion | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **fensulfothion** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| fenthion | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **fenthion** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| fluchloralin | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **fluchloralin** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| fluoranthene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| fluoranthene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| fluoranthene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **fluoranthene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| fluorene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| fluorene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| fluorene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **fluorene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| fluoride | < | 1 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| fluoride | = | 3 | mg/L | city | composite | 09/24/2001 12:01 PM | 1B |
| fluoride | < | 1 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| **fluoride** | | **Minimum** | **0.5000 mg/L** | | | **Count 3** | |
| | | **Average** | **1.3333 mg/L** | | | | |
| | | **Maximum** | **3.0000 mg/L** | | | | |
| heptachlor | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **heptachlor** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| heptachlor epoxide | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **heptachlor epoxide** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| hexachlorobenzene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| hexachlorobenzene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| hexachlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **hexachlorobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| hexachlorobutadiene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| hexachlorobutadiene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **hexachlorobutadiene** | | **Minimum** | **0.0050 mg/L** | | | **Count 7** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| hexachlorocyclopentadiene | < | 0.02 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| hexachlorocyclopentadiene | < | 0.02 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| hexachlorocyclopentadiene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **hexachlorocyclopentadiene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0083 mg/L** | | | | |
| | | **Maximum** | **0.0100 mg/L** | | | | |
| hexachloroethane | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| hexachloroethane | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| hexachloroethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **hexachloroethane** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| hexachlorophene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **hexachlorophene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| hexachloropropene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **hexachloropropene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| hexamethyl phosphoramide | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **hexamethyl phosphoramide** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| hydroquinone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **hydroquinone** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| indeno (1,2,3-cd) pyrene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| indeno (1,2,3-cd) pyrene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| indeno (1,2,3-cd) pyrene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **indeno (1,2,3-cd) pyrene** | | | **Minimum** | | **0.0050 mg/L** | **Count 3** | |
| | | | **Average** | | **0.0050 mg/L** | | |
| | | | **Maximum** | | **0.0050 mg/L** | | |
| isobutyl alcohol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **isobutyl alcohol** | | | **Minimum** | | **0.0050 mg/L** | **Count 1** | |
| | | | **Average** | | **0.0050 mg/L** | | |
| | | | **Maximum** | | **0.0050 mg/L** | | |
| isodrin | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **isodrin** | | | **Minimum** | | **0.0050 mg/L** | **Count 1** | |
| | | | **Average** | | **0.0050 mg/L** | | |
| | | | **Maximum** | | **0.0050 mg/L** | | |
| isophorone | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| isophorone | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| isophorone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **isophorone** | | | **Minimum** | | **0.0050 mg/L** | **Count 3** | |
| | | | **Average** | | **0.0050 mg/L** | | |
| | | | **Maximum** | | **0.0050 mg/L** | | |
| isopropylbenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| isopropylbenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| isopropylbenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| isopropylbenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **isopropylbenzene** | | | **Minimum** | | **0.0050 mg/L** | **Count 4** | |
| | | | **Average** | | **0.0050 mg/L** | | |
| | | | **Maximum** | | **0.0050 mg/L** | | |
| isosafrole | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **isosafrole** | | | **Minimum** | | **0.0050 mg/L** | **Count 1** | |
| | | | **Average** | | **0.0050 mg/L** | | |
| | | | **Maximum** | | **0.0050 mg/L** | | |
| kepone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **kepone** | | | **Minimum** | | **0.0050 mg/L** | **Count 1** | |
| | | | **Average** | | **0.0050 mg/L** | | |
| | | | **Maximum** | | **0.0050 mg/L** | | |
| leptophos | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **leptophos** | | | **Minimum** | | **0.0050 mg/L** | **Count 1** | |
| | | | **Average** | | **0.0050 mg/L** | | |
| | | | **Maximum** | | **0.0050 mg/L** | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| malathion | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **malathion** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| maleic anhydride | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **maleic anhydride** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| mcpa | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **mcpa** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| mcpp | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **mcpp** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| mestranol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **mestranol** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methapyrilene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **methapyrilene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methoxychlor | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **methoxychlor** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methyl iodide | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| methyl iodide | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| methyl iodide | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| methyl iodide | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **methyl iodide** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| methyl parathion | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **methyl parathion** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methylacrylonitrile | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **methylacrylonitrile** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methylene chloride | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| methylene chloride | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| methylene chloride | < | 0.005 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| methylene chloride | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| methylene chloride | < | 0.01 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| methylene chloride | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **methylene chloride** | | **Minimum** | **0.0025 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0046 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| methylmethanesulfonate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **methylmethanesulfonate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| mevinphos | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **mevinphos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| mexacarbate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **mexacarbate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| mirex | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **mirex** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| molybdenum | < | 0.2 | mg/L | city | comp/split | 01/23/2001 9:34 AM | 1B |
| molybdenum | = | 0.03 | mg/L | self | comp/split | 01/23/2001 9:34 AM | 1B |
| molybdenum | < | 0.2 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| molybdenum | < | 0.2 | mg/L | city | composite | 09/24/2001 12:01 PM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| molybdenum | < | 0.2 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| **molybdenum** | | **Minimum** | **0.0300 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0860 mg/L** | | | | |
| | | **Maximum** | **0.1000 mg/L** | | | | |
| monocrotophos | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **monocrotophos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| naled | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **naled** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| naphthalene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| naphthalene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| naphthalene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| naphthalene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| naphthalene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| naphthalene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| naphthalene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **naphthalene** | | **Minimum** | **0.0050 mg/L** | | | **Count 7** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-butylbenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| n-butylbenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| n-butylbenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| n-butylbenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **n-butylbenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| nicotine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **nicotine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| nitrobenzene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| nitrobenzene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| nitrobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **nitrobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| nitrofen | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **nitrofen** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| nitroquinoline-1-oxide | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **nitroquinoline-1-oxide** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-ninitrosopiperidine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **n-ninitrosopiperidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-nitrosodibutylamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **n-nitrosodibutylamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-nitrosodiethylamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **n-nitrosodiethylamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-nitrosodimethylamine | < | 0.04 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| n-nitrosodimethylamine | < | 0.04 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| n-nitrosodimethylamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **n-nitrosodimethylamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0150 mg/L** | | | | |
| | | **Maximum** | **0.0200 mg/L** | | | | |
| n-nitroso-di-n-propylamine | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| n-nitroso-di-n-propylamine | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| n-nitroso-di-n-propylamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **n-nitroso-di-n-propylamine** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| n-nitrosodiphenylamine | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| n-nitrosodiphenylamine | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| n-nitrosodiphenylamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **n-nitrosodiphenylamine** | | **Minimum** | | **0.0050 mg/L** | | **Count 3** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| n-nitrosomethylethylamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| n-nitrosomethylethylamine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **n-nitrosomethylethylamine** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| n-nitrosomorpholine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **n-nitrosomorpholine** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| n-nitrosopyrrolidine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **n-nitrosopyrrolidine** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| n-propylbenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| n-propylbenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| n-propylbenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| n-propylbenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **n-propylbenzene** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| o-anisidine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **o-anisidine** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| octamethylpyrophosphoramide | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **octamethylpyrophosphoramide** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| o-toluidine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **o-toluidine** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| o-xylene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| o-xylene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| o-xylene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **o-xylene** | | **Minimum** | | **0.0050 mg/L** | | **Count 3** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| parathion | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **parathion** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| p-benzoquinone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| p-benzoquinone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **p-benzoquinone** | | **Minimum** | | **0.0050 mg/L** | | **Count 2** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| pcb 1016 | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pcb 1016** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| pcb 1221 | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pcb 1221** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| pcb 1232 | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pcb 1232** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| pcb 1242 | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pcb 1242** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| pcb 1248 | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pcb 1248** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |

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Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pcb 1254 | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pcb 1254** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pcb 1260 | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pcb 1260** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| p-cresidine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **p-cresidine** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| p-dimethylaminoazobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **p-dimethylaminoazobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pentachlorobenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pentachlorobenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pentachloroethane | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pentachloroethane** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pentachloronitrobenzene (pcnb) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pentachloronitrobenzene (pcnb)** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pentachlorophenol | < | 0.04 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| pentachlorophenol | < | 0.04 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| pentachlorophenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pentachlorophenol** | | **Minimum** | **0.0050 mg/L** | | | **Count 3** | |
| | | **Average** | **0.0150 mg/L** | | | | |
| | | **Maximum** | **0.0200 mg/L** | | | | |
| pH | = | 9.1 | std units | city | grab | 01/23/2001 9:32 AM | 1B |
| pH | = | | std units | self | continuous | 01/31/2001 | 1B |
| pH | = | | std units | self | continuous | 02/28/2001 | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| pH | = | | std units | self | continuous | 03/30/2001 | 1B |
| pH | = | | std units | self | continuous | 03/30/2001 | 1B |
| pH | = | | std units | self | continuous | 04/30/2001 | 1B |
| pH | = | 11.8 | std units | self | grab | 05/22/2001 5:45 PM | 1B |
| pH | = | | std units | self | continuous | 05/31/2001 | 1B |
| pH | = | 9.4 | std units | city | grab/split | 06/25/2001 11:30 AM | 1B |
| pH | = | | std units | self | continuous | 06/30/2001 | 1B |
| pH | = | | std units | self | continuous | 07/31/2001 | 1B |
| pH | = | 9.5 | std units | city | grab/split | 09/24/2001 12:00 PM | 1B |
| pH | = | | std units | self | continuous | 09/30/2001 | 1B |
| pH | = | | std units | self | continuous | 10/31/2001 | 1B |
| pH | = | 8.8 | std units | city | grab/split | 11/26/2001 10:30 AM | 1B |
| pH | = | | std units | self | continuous | 11/30/2001 | 1B |
| pH | = | | std units | self | continuous | 12/31/2001 | 1B |
| **pH** | | | **Minimum** | **8.8000 std units** | | **Count 17** | |
| | | | **Maximum** | **11.8000 std units** | | | |
| phenacetin | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **phenacetin** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| phenanthrene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| phenanthrene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| phenanthrene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **phenanthrene** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| phenobarbital | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **phenobarbital** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| phenol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **phenol** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| phenols - total (epa 420) | < | 0.02 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |

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Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| phenols - total (epa 420) | < | 0.02 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| **phenols - total (epa 420)** | | **Minimum** | **0.0100 mg/L** | | | **Count 2** | |
| | | **Average** | **0.0100 mg/L** | | | | |
| | | **Maximum** | **0.0100 mg/L** | | | | |
| phorate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **phorate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| phosalone | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **phosalone** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| phosmet | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **phosmet** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| phosphamidon | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **phosphamidon** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| phthalic anhydride | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **phthalic anhydride** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| piperonyl sulfoxide | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **piperonyl sulfoxide** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| pronamide | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pronamide** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| propionitrile | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **propionitrile** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| propylthiouracil | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **propylthiouracil** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| pyrene | < | 0.01 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| pyrene | < | 0.01 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| pyrene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pyrene** | | **Minimum** | | **0.0050 mg/L** | | **Count 3** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| pyridine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **pyridine** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| resorcinol | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **resorcinol** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| safrole | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **safrole** | | **Minimum** | | **0.0050 mg/L** | | **Count 1** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| sec-butylbenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| sec-butylbenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| sec-butylbenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| sec-butylbenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **sec-butylbenzene** | | **Minimum** | | **0.0050 mg/L** | | **Count 4** | |
| | | **Average** | | **0.0050 mg/L** | | | |
| | | **Maximum** | | **0.0050 mg/L** | | | |
| solids - total | = | 459 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| solids - total | = | 469 | mg/L | city | composite | 09/24/2001 12:01 PM | 1B |
| solids - total | = | 443 | mg/L | city | composite | 09/25/2001 9:30 AM | 1B |
| solids - total | = | 454 | mg/L | city | composite | 09/26/2001 9:35 AM | 1B |
| solids - total | = | 381 | mg/L | city | composite | 09/27/2001 9:35 AM | 1B |
| solids - total | = | 417 | mg/L | city | composite | 09/28/2001 11:12 AM | 1B |
| solids - total | = | 690 | mg/L | city | composite | 09/29/2001 10:04 AM | 1B |
| solids - total | = | 538 | mg/L | city | composite | 09/30/2001 10:04 AM | 1B |

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Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| solids - total | = | 466 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| **solids - total** | | **Minimum** | | **381.0000 mg/L** | | **Count 9** | |
| | | **Average** | | **479.6667 mg/L** | | | |
| | | **Maximum** | | **690.0000 mg/L** | | | |
| solids - total dissolved | = | 380 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| solids - total dissolved | = | 430 | mg/L | city | composite | 09/24/2001 12:01 PM | 1B |
| solids - total dissolved | = | 420 | mg/L | city | composite | 09/25/2001 9:30 AM | 1B |
| solids - total dissolved | = | 310 | mg/L | city | composite | 09/26/2001 9:35 AM | 1B |
| solids - total dissolved | = | 360 | mg/L | city | composite | 09/27/2001 9:35 AM | 1B |
| solids - total dissolved | = | 350 | mg/L | city | composite | 09/28/2001 11:12 AM | 1B |
| solids - total dissolved | = | 470 | mg/L | city | composite | 09/29/2001 10:04 AM | 1B |
| solids - total dissolved | = | 300 | mg/L | city | composite | 09/30/2001 10:04 AM | 1B |
| solids - total dissolved | = | 390 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| **solids - total dissolved** | | **Minimum** | | **300.0000 mg/L** | | **Count 9** | |
| | | **Average** | | **378.8889 mg/L** | | | |
| | | **Maximum** | | **470.0000 mg/L** | | | |
| solids - total suspended | = | 347 | mg/L | city | comp/split | 01/23/2001 9:34 AM | 1B |
| solids - total suspended | = | 135 | mg/L | self | composite | 03/01/2001 7:30 AM | 1B |
| solids - total suspended | = | 158 | mg/L | self | composite | 06/07/2001 7:45 AM | 1B |
| solids - total suspended | = | 77.6 | mg/L | city | composite | 06/25/2001 11:31 AM | 1B |
| solids - total suspended | = | 225 | mg/L | self | composite | 09/06/2001 7:30 AM | 1B |
| solids - total suspended | = | 101 | mg/L | self | composite | 09/13/2001 9:00 AM | 1B |
| solids - total suspended | = | 41 | mg/L | city | composite | 09/24/2001 12:01 PM | 1B |
| solids - total suspended | = | 23 | mg/L | city | composite | 09/25/2001 9:30 AM | 1B |
| solids - total suspended | = | 140 | mg/L | city | composite | 09/26/2001 9:35 AM | 1B |
| solids - total suspended | = | 365 | mg/L | self | composite | 09/27/2001 9:00 AM | 1B |
| solids - total suspended | = | 25 | mg/L | city | composite | 09/27/2001 9:35 AM | 1B |
| solids - total suspended | = | 66 | mg/L | city | composite | 09/28/2001 11:12 AM | 1B |
| solids - total suspended | = | 217 | mg/L | city | composite | 09/29/2001 10:04 AM | 1B |
| solids - total suspended | = | 242 | mg/L | city | composite | 09/30/2001 10:04 AM | 1B |
| solids - total suspended | = | 78 | mg/L | city | comp/split | 11/26/2001 10:31 AM | 1B |
| solids - total suspended | = | 138 | mg/L | self | composite | 12/06/2001 7:30 AM | 1B |
| **solids - total suspended** | | **Minimum** | | **23.0000 mg/L** | | **Count 16** | |
| | | **Average** | | **148.6625 mg/L** | | | |
| | | **Maximum** | | **365.0000 mg/L** | | | |
| styrene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| styrene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| styrene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| styrene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |

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Org Id **1592**

Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| styrene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **styrene** | | **Minimum** | **0.0050 mg/L** | | | **Count 5** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| sulfallate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **sulfallate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| terbufos | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **terbufos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| tert-butylbenzene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| tert-butylbenzene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| tert-butylbenzene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| tert-butylbenzene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **tert-butylbenzene** | | **Minimum** | **0.0050 mg/L** | | | **Count 4** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| tetrachloroethene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| tetrachloroethene | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| tetrachloroethene | < | 0.003 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| tetrachloroethene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| tetrachloroethene | < | 0.006 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| tetrachloroethene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **tetrachloroethene** | | **Minimum** | **0.0015 mg/L** | | | **Count 6** | |
| | | **Average** | **0.0041 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| tetrachlorvinphos | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **tetrachlorvinphos** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |
| tetraethyl pyrophosphate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **tetraethyl pyrophosphate** | | **Minimum** | **0.0050 mg/L** | | | **Count 1** | |
| | | **Average** | **0.0050 mg/L** | | | | |
| | | **Maximum** | **0.0050 mg/L** | | | | |

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Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| thionazine | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **thionazine** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| thiophenol (benzenethiol) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **thiophenol (benzenethiol)** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| toluene | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| toluene | = | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| toluene | < | 0.003 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| toluene | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| toluene | < | 0.006 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| toluene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **toluene** | | | **Minimum** | **0.0015 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0049 mg/L** | | | |
| | | | **Maximum** | **0.0100 mg/L** | | | |
| toluene diisocyanate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **toluene diisocyanate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| toxaphene | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **toxaphene** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| trichloroethene (tce) | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| trichloroethene (tce) | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| trichloroethene (tce) | < | 0.002 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| trichloroethene (tce) | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| trichloroethene (tce) | < | 0.004 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| trichloroethene (tce) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **trichloroethene (tce)** | | | **Minimum** | **0.0010 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0038 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| trichlorofluoromethane (freon-11) | < | 0.005 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |

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Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| trichlorofluoromethane (freon-11) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **trichlorofluoromethane (freon-11)** | | | **Minimum** | **0.0025 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0046 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| trifluraline | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **trifluraline** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| trimethyl phosphate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **trimethyl phosphate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| tri-p-tolyl phosphate(h) | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **tri-p-tolyl phosphate(h)** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| tris(2,3-dibromopropyl) phosphate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **tris(2,3-dibromopropyl) phosphate** | | | **Minimum** | **0.0050 mg/L** | | **Count 1** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| vinyl acetate | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| vinyl acetate | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| vinyl acetate | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **vinyl acetate** | | | **Minimum** | **0.0050 mg/L** | | **Count 3** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| vinyl chloride | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| vinyl chloride | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| vinyl chloride | < | 0.005 | mg/L | city | grab/split | 06/25/2001 11:30 AM | 1B |
| vinyl chloride | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| vinyl chloride | < | 0.01 | mg/L | city | grab/split | 09/24/2001 12:00 PM | 1B |
| vinyl chloride | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **vinyl chloride** | | | **Minimum** | **0.0025 mg/L** | | **Count 6** | |
| | | | **Average** | **0.0046 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| xylene, m- | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| xylene, m- | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| xylene, m- | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |

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Org Name **WACKER SILTRONIC CORP** Permit Number **469.001**

| Analyte Name | Result Op | Numeric Result | Analyte Units | Tester | Sample Type | Collection Date | Location Code |
|---|---|---|---|---|---|---|---|
| xylene, m- | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **xylene, m-** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| xylene, o- | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| xylene, o- | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| xylene, o- | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| xylene, o- | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **xylene, o-** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| xylene, p- | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| xylene, p- | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| xylene, p- | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| xylene, p- | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **xylene, p-** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |
| xylenes, total | < | 0.01 | mg/L | self | grab | 03/01/2001 7:30 AM | 1B |
| xylenes, total | < | 0.01 | mg/L | self | grab | 06/07/2001 7:40 AM | 1B |
| xylenes, total | < | 0.01 | mg/L | self | grab | 09/06/2001 7:30 AM | 1B |
| xylenes, total | < | 0.01 | mg/L | self | grab | 12/06/2001 7:30 AM | 1B |
| **xylenes, total** | | | **Minimum** | **0.0050 mg/L** | | **Count 4** | |
| | | | **Average** | **0.0050 mg/L** | | | |
| | | | **Maximum** | **0.0050 mg/L** | | | |

*** Note - those results which have an operator of '<' are divided in half to determine minimums, maximums, and averages