ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

US EPA RECORDS CENTER REGION 5
482381

CRL Receipt Date 1/18/89 FIT Receipt Date 2/3/89 Review Completed 2/6/89

TO: Skinner
FROM: Mary Gzyra
SUBJECT: Titanium Metals.
PAN: OH0803SA (1 hour charged for review) Case # 11111/4231

Sample Description

| Organics (VOA, ABN, Pest/PCB) | | Inorganics (Metals, Cyanide) | |
|---|---|---|---|
| # | Low Soil | # | Low Soil |
| | Low Water | | Low Water |
| 7 | Drinking Water | | Drinking Water |
| | Other | | Other |

Project Data Status _____ Completed!!

✓ Incomplete, awaiting DW voig; soil & water org & voig.

FIT Data Review Findings:

CLA + HH detected.

***Check Data Sheets for Transcription Errors***

_____ Compounds were detected in sample(s); see enclosed sheet.

Book No. 1 Page No. _____ Date Sampled 12/14

0759:2

recycled paper

Zg 2/6/89

Table 4-_>_
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED >_____ SAMPLES

| 2070-13 Physical State* | Waste Characteristics** | Category*** | SI Memo | Sample Collection Information and Parameters | >_1 RW1 | >_2 RW2 | >_3 RW3 | >_4 Dup | >_5 RW4 | >_6 RW5 | >_7 BLANK | >_8 | >_9 | >_10 | >_11 | >_12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Date | | | | | | | | | | | | |
| | | | | Time | | | | | | | | | | | | |
| | | | | Organic Traffic Report Number | ECW 25 | ECW 26 | ECW 27 | ECW 30 | ECW 28 | ECW 29 | ECW 31 | | | | | |
| | | | | Inorganic Traffic Report Number | | | | | | | | | | | | |
| | | | | Temperature (°C) | | | | | | | | | | | | |
| | | | | Specific Conductivity (µmhos) | | | | | | | | | | | | |
| | | | | pH | | | | | | | | | | | | |
| | | | | Compound Detected (values in > µg/L or µg/kg) | | | | | | | | | | | | |
| | | | | Volatile Organics | | | | | | | | | | | | |
| Gas | A,D,G,I | OCC | HH | chloromethane | | | | | | | | | | | | |
| Gas | A,D,G,I | OCC | HH | bromomethane | | | | | | | | | | | | |
| Gas | A,D,G,I | OCC | HH | vinyl chloride | | | | | | | | | | | | |
| Gas | A,D,G,I | OCC | HH | chloroethane | | | | | | | | | | | | |
| Liquid | A,D,H,I | SOL | HH,CLA | methylene chloride | | | 1 J | 2 J | 2 | 4 | 2 | | | | | |
| Liquid | E,H,I,A | SOL | K,CLA | acetone | | | | | | | | | | | | |
| Liquid | A,H,I | SOL | SH | carbon disulfide | | | | | | | | | | | | |
| Liquid | A,D,G,I | SOL | HH | 1,1-dichloroethene | | | | | | | | | | | | |
| Liquid | A,D,H,G | SOL | HH | 1,1-dichloroethane | | | | | | | | | | | | |
| Liquid | A,D,G | SOL | HH | 1,2-dichloroethene (total) | | | | | | | | | | | | |
| Liquid | A,D | SOL | HH | chloroform | | | 1 | 1 J | | | 6 | | | | | |
| Liquid | A,D,G | SOL | HH | 1,2-dichloroethane | | | | | | | | | | | | |
| Liquid | A,E,G | SOL | K,CLA | 2-butanone (MEK) | | | | | | | | | | | | |
| Liquid | A,D | SOL | HH | 1,1,1-trichloroethane | | | 1 J | 3 J | | | | | | | | |
| Liquid | A,D | SOL | HH | carbon tetrachloride | | | | | | | | | | | | |
| Liquid | A,D,G | SOL | HYD | vinyl acetate | | | | | | | | | | | | |
| Liquid | A,D | OCC | HH | bromodichloromethane | | | | | | | 3 | | | | | |
| Liquid | A,D,G | SOL | HH | 1,2-dichloropropane | | | | | | | | | | | | |
| Liquid | A,D,G | SOL | HH | cis-1,3-dichloropropene | | | | | | | | | | | | |
| Liquid | A,D,G,B | SOL | HH | trichloroethene | | | | | | | 1 J | | | | | |
| Liquid | A,D | OCC | HH | dibromochloromethane | | | | | | | | | | | | |
| Liquid | A,D | SOL | HH | 1,1,2-trichloroethane | | | | | | | | | | | | |
| Liquid | A,G | SOL | A | benzene | | | | | | | | | | | | |
| Liquid | A,D,G | SOL | HH | trans-1,3-dichloropropene | | | | | | | | | | | | |
| Liquid | A,D | SOL | HH,CLA | bromoform | | | | | | | | | | | | |
| Liquid | A,E,G | SOL | K,CLA | 4-methyl-2-pentanone | | | | | | | | | | | | |
| Liquid | A,E,G | SOL | K | 2-hexanone | | | | | | | 7 | | | | | |
| Liquid | A,D | SOL | HH | tetrachloroethene | | | | | | | | | | | | |
| Liquid | A,G,E | SOL | A,CLA | toluene | | | | | | | | | | | | |
| Liquid | A,D,E | SOL | HH | 1,1,2,2-tetrachloroethane | | | | | | | | | | | | |
| Liquid | A,D,G | SOL | HA | chlorobenzene | | | | | | | | | | | | |
| Liquid | A,G | SOL | A | ethylbenzene | | | | | | | | | | | | |
| Liquid | A,D,G | OCC | A | styrene | | | | | | | | | | | | |
| Liquid | A,G | SOL | A | xylenes (total) | | | | | | | 1 J | | | | | |
| LIQUID | A,G,K,I | OCC | HYD | ACROLEIN | | | | | | | | | | | | |

Table 4-> Cont.

| Physical State* | Waste Characteristics** | Category*** | SI Memo | Sample Collection Information and Parameters | Sample Number ≥ 1 | ≥ 2 | ≥ 3 | ≥ 4 | ≥ 5 | ≥ 6 | ≥ 7 | ≥ 8 | ≥ 9 | ≥ 10 | ≥ 11 | ≥ 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Semivolatile Organics, Cont. | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | anthracene | | | | | | | | | | | | |
| Liquid | A,D | OCC | PH,CLA | di-n-butylphthalate | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | fluoranthene | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | pyrene | | | | | | | | | | | | |
| Liquid | A,D | OCC | PH,CLA | butylbenzylphthalate | | | | | | | | | | | | |
| | A,D | OCC | HA | 3,3'-dichlorobenzidine | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | benzo[a]anthracene | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | chrysene | | | | | | | | | | | | |
| Liquid | A,D | OCC | PH,CLA | bis(2-ethylhexyl)phthalate | | | | | | | | | | | | |
| Liquid | A,D | OCC | PH,CLA | di-n-octylphthalate | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | benzo[b]fluoranthene | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | benzo[k]fluoranthene | | | | | | | | | | | | |
| Solid | A,D,K,L | OCC | PAH | benzo[a]pyrene | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | indeno[1,2,3-cd]pyrene | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | dibenzo[a,h]anthracene | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | benzo[g,h,i]perylene | | | | | | | | | | | | |
| | | | | Pesticides/PCBs | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | alpha BHC | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | beta BHC | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | delta BHC | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | gamma BHC (Lindane) | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | Heptachlor | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | Aldrin | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | Heptachlor epoxide | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | Endosulfan I | | | | | | | | | | | | |
| Solid | A,D,E | PSD | PEST | Dieldrin | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | 4,4'-DDE | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | Endrin | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | Endosulfan II | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | 4,4'-DDD | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | Endosulfan sulfate | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | 4,4'-DDT | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | Methoxychlor (Mariate) | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | Endrin ketone | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | alpha Chlordane | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | gamma Chlordane | | | | | | | | | | | | |
| Solid | A,D | PSD | PEST | Toxaphene | | | | | | | | | | | | |
| Liquid | A,D | OCC | PCB | Aroclor 1016 | | | | | | | | | | | | |
| Liquid | A,D | OCC | PCB | Aroclor 1221 | | | | | | | | | | | | |
| Liquid | A,D | OCC | PCB | Aroclor 1232 | | | | | | | | | | | | |
| Liquid | A,D | OCC | PCB | Aroclor 1242 | | | | | | | | | | | | |
| Liquid | A,D | OCC | PCB | Aroclor 1248 | | | | | | | | | | | | |
| Liquid | A,D | OCC | PCB | Aroclor 1254 | | | | | | | | | | | | |
| Liquid | A,D | OCC | PCB | Aroclor 1260 | | | | | | | | | | | | |

Table 4-> Cont.

| 2070-13 | | | | Sample Collection Information and Parameters | Sample Number | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Physical State* | Waste CHARACTERISTICS | CATEGORY** | SI Memo | | ≥ 1 | ≥ 2 | ≥ 3 | ≥ 4 | ≥ 5 | ≥ 6 | ≥ 7 | ≥ 8 | ≥ 9 | ≥ 10 | ≥ 11 | ≥ 12 |
| | | | | Semivolatile Organics | | | | | | | | | | | | |
| S, thick liquid | A,B,E | OCC | P | phenol | | | 1 J | 2 | | 1 J | 2 | | | | | |
| Liquid | A,D,B | OCC | HH | bis(2-chloroethyl)ether | | | | | | | | | | | | |
| Liquid | A,D,B | OCC | P | 2-chlorophenol | | | | | | | | | | | | |
| Liquid | A,D,H | SOL | HA | 1,3-dichlorobenzene | | | | | | | | | | | | |
| Solid | A,D,H | OCC | HA | 1,4-dichlorobenzene | | | | | | | | | | | | |
| Liquid | A,D,H | SOL | A | benzyl alcohol | | | | | | | | | | | | |
| Liquid | A,D,H | OCC | HA | 1,2-dichlorobenzene | | | | | | | | | | | | |
| Liquid | A,B | OCC | P | 2-methylphenol | | | | | | | | | | | | |
| | A,D | OCC | HH | bis(2-chloroisopropyl)ether | | | | | | | | | | | | |
| Liquid | A,B | OCC | P | 4-methylphenol | | | | | | | | | | | | |
| | A | OCC | H-Amine | n-nitroso-di-n-dipropylamine | | | | | | | | | | | | |
| Solid | A,D | OCC | HH | hexachloroethane | | | | | | | | | | | | |
| Liquid | A,D | OCC | HA | nitrobenzene | | | | | | | | | | | | |
| Liquid | A,D | OCC | H | isophorone | | | | | | | | | | | | |
| Solid | A,D | OCC | P | 2-nitrophenol | | | | | | | | | | | | |
| Solid | A,B | OCC | P | 2,4-dimethylphenol | | | | | | | | | | | | |
| Solid | A | OCC | A | benzoic acid | | | | | | | | | | | | |
| | A,D | OCC | HH | bis(2-chloroethoxy)methane | | | | | | | | | | | | |
| Liquid | A,D | OCC | P | 2,4-dichlorophenol | | | | | | | | | | | | |
| Liquid | A,D | OCC | HA | 1,2,4-trichlorobenzene | | | | | | | | | | | | |
| Solid | A | OCC | PAH | naphthalene | | | | | | | | | | | | |
| Solid | A,D | OCC | HH | 4-chloroaniline | | | | | | | | | | | | |
| Liquid | A,D,B | OCC | HH | hexachlorobutadiene | | | | | | | | | | | | |
| Solid | A,D | OCC | P | 4-chloro-3-methylphenol | | | | | | | | | | | | |
| Liquid | A,D | OCC | PAH | 2-methylnaphthalene | | | | | | | | | | | | |
| Liquid | A,D,B | OCC | HH | hexachlorocyclopentadiene | | | | | | | | | | | | |
| Solid | A,D | OCC | P | 2,4,6-trichlorophenol | | | | | | | | | | | | |
| Solid | A,D | OCC | P | 2,4,5-trichlorophenol | | | | | | | | | | | | |
| Liquid | A,D | OCC | PAH | 2-chloronaphthalene | | | | | | | | | | | | |
| Solid | A,D | OCC | NH | 2-nitroaniline | | | | | | | | | | | | |
| Liquid | A,D | OCC | PH,CLA | dimethylphthalate | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | acenaphthylene | | | | | | | | | | | | |
| Solid | A,D | OCC | HA | 2,6-dinitrotoluene | | | | | | | | | | | | |
| Solid | A,D | OCC | NH | 3-nitroaniline | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | acenaphthene | | | | | | | | | | | | |
| Solid | A,D,G | OCC | P | 2,4-dinitrophenol | | | | | | | | | | | | |
| Solid | A,D | OCC | P | 4-nitrophenol | | | | | | | | | | | | |
| Solid | A,D | OCC | A | dibenzofuran | | | | | | | | | | | | |
| Solid | A,D | OCC | HA | 2,4-dinitrotoluene | | | | | | | | | | | | |
| Liquid | A,D | OCC | PH | diethylphthalate | | | | | | | | | | | | |
| | A,D | OCC | HH | 4-chlorophenyl-phenylether | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | fluorene | | | | | | | | | | | | |
| Solid | A,D,E | OCC | NH | 4-nitroaniline | | | | | | | | | | | | |
| Solid | A,D | OCC | P | 4,6-dinitro-2-methylphenol | | | | | | | | | | | | |
| Solid | A,D | OCC | NH | n-nitrosodiphenylamine | | | | | | | | | | | | |
| Liquid | A,D | OCC | HH | 4-bromophenyl-phenylether | | | | | | | | | | | | |
| Solid | A,D | OCC | HA | hexachlorobenzene | | | | | | | | | | | | |
| Solid | A,D | OCC | P | pentachlorophenol | | | | | | | | | | | | |
| Solid | A,D | OCC | PAH | phenanthrene | | | | | | | | | | | | |

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: February 1, 1989

2/3/89

SUBJECT: Review of Region V CLP Data Received for Review on 1-18-89

FROM: Curtis Ross, Director (5SCRL) Central Regional Laboratory Dorothy M. May

TO: Data User: Rit

We have reviewed the data for the following case(s).

SITE NAME: Titanium Metals SMO Case No. 11111 14231E

EPA Data Set No. SF 5815 No. of Samples: 7 D.U./Activity Numbers 1905/TEA102

CRL No. 89FS08584-S28, D26, R02

SMO Traffic No. ECW25-31

CLP Laboratory: Compu Chem Hrs. Required for Review: 7

Following are our findings:

THIS DATA REVIEW COVERS THE ANALYSIS OF SEVEN WATER SAMPLES FOR VOLATILES, S-VOLATILES AND PESTICIDES/PCB'S. DETECTION LIMITS WERE LOW AS SPECIFIED BY SAS 4231E. THERE WERE NO MAJOR PROBLEMS WHICH WOULD CAUSE THE DATA TO BE UNUSABLE. HOWEVER, THERE ARE SEVERAL POINTS WHICH ARE OF IMPORTANCE TO BE DISCUSSED IN THE FOLLOWING SECTION. THE ACID FRACTIONS OF ECW-28 AND ECW 28RE ARE FLAGGED UNUSABLE (R) FOR NEGATIVE RESULTS DUE TO ZERO SURROGATE RECOVERIES.

( ) Data are acceptable for use.
(✓) Data are acceptable for use with qualifications referenced above. See Data Qualifier sheets and Calibration Outlier forms for flags and additional comments.
( ) Data are preliminary - pending verification by Contractor Laboratory. See Case Summary above.
( ) Data are unacceptable.

Robert Kalyn
WESTON/ESAT
1/24/89

cc: - Carla Dempsey, CLP Quality Assurance Officer, Analytical Operations Branch
James Petty, Chief Quality Assurance Research, EMSL, Las Vegas

DATA QUALIFIERS

Contractor: COMPUCHEM

Case 11111 / 4231F.

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(1) HOLDING TIME

SAMPLES WERE RECEIVED 12/15/88 BY COMPUCHEM.

VOA: ALL SAMPLES WERE RAN WITHIN THE SPECIFIED TIME.

S-VOA: ALL HOLDING TIMES WERE SATISFACTORY.

PESTICIDES: SAMPLE ECW 30 WAS EXTRACTED 7 DAYS PAST THE SEVEN DAYS PERMITTED, FROM TIME OF SAMPLE RECEIPT TO TIME OF EXTRACTION. THEREFORE, THE PESTICIDE ECW 30 FORM I HAVE ALL COMPOUNDS FLAGGED ESTIMATED (J) FOR POSITIVES AND ESTIMATED (UJ) FOR THE SAMPLE QUANT. LIMITS.

(2) GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

GC/MS TUNING WAS SATISFACTORY AS WAS THE GC INSTRUMENT PERFORMANCE.

(3) CALIBRATION

CALIBRATION OUTLIERS ARE LISTED IN THE CALIBRATION OUTLIER FORMS. THE INITIAL CALIB. (12/20) AND CONT. CALIB. (12/19) LISTS ACROLEIN ~~[illegible]~~ BELOW CRQL FLAG (J/R). THE PESTICIDE CONTINUOUS CALIB. OF 12/30/88 (05:49) HAS 8 OF 10 COMPOUNDS OVER 20%D FOR CONFIRMATION. THE CONTINUOUS CALIB. OF 12/30 (06:16) HAS 5 OF 9 COMPOUNDS OVER 20%D FOR CONFIRMATION. NO FLAGGING IS NECESSARY BECAUSE THERE WERE NO CORRESPONDING POSITIVE RESULTS.

Reviewed by: Robert Katzen

Phone: 317-353-2917

Date: 1/24/89.

DATA QUALIFIERS

Contractor: COMPUCHEM

Case 11111 / 4231E

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(4) BLANKS

VOA: ACETONE WAS FOUND, BELOW 4X ITS CRQL, IN BLANKS VBLKAD, VBLKH4, VBLKST AND VBLKXD. IF ACETONE APPEARED IN A CORRESPONDING SAMPLE SHOWN ON FORM I-VOA, AND IT IS LESS THAN 10X THE AMOUNT IN THE BLANK, IT HAS BEEN FLAGGED IN THE SAMPLE FORM I'S WITH THE SAMPLE QUANTITATION LIMIT (U) FOR ACETONE. NO TIC'S WERE FOUND IN THE VOA BLANKS

S-VOA: NO TCL'S OR TIC'S WERE FOUND IN THE S-VOA BLANKS.

PESTICIDES: α-BHC AND γ-BHC WERE FOUND IN PBLK15 AS WELL AS THE SAMPLES IDENTIFIED ON FORM I-PEST. THEY WERE GIVEN THE X (ESTIMATED FLAG) WHEN IT APPEARED IN A SAMPLE. IT WAS IDENTIFIED AS A LABORATORY CONTAMINANT.

(5) SURROGATE RECOVERY

VOA: THE WATER VOA SURROGATE 1,2-DICHLOROETHANE-d4 ON SAMPLE ECW30 WAS BELOW QC RANGE AND THE REPEAT, ECW30RE HAD TOLUENE-d8, BROMOFLUOROBENZENE AND 1,2-DICHLOROETHANE-d4 BELOW QC LIMITS. THEREFORE, SAMPLES ECW30 AND ECW30RE ARE FLAGGED ESTIMATED (J) FOR POSITIVES AND THE SAMPLE QUANT. LIMIT IS ESTIMATED (UJ).

Reviewed by: Robert Katzen

Phone: 312-353-2917

Date: 1/24/89

DATA QUALIFIERS

Contractor: COMPACHEM

Case 11111 / 4231E

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

SURROGATES - CONTINUED:

SEMI-VOLATILE: NITROBENZENE-d5 WAS BELOW QC LIMITS FOR ECW 28RE. 2-FLUOROPHENOL WAS BELOW QC LIMITS FOR ECW 25, ECW 26, ECW 29MS AND ECW 29MSD. NO FLAGGING WAS NECESSARY FOR THE ABOVE SAMPLES.

ECW 28 AND ECW 28RE HAD ZERO (0) RECOVERIES FOR PHENOL-d5, 2-FLUOROPHENOL AND 2,4,6-TRIBROMOPHENOL. THEREFORE, THE ACID FRACTIONS OF ECW-28 AND ECW-28RE ARE FLAGGED ESTIMATED (J) FOR POSITIVE RESULTS AND THE NEGATIVE RESULTS FOR THAT FRACTION ARE FLAGGED ~~AR~~ RX 1/24/89 AS UNUSABLE (R).

PESTICIDES: ALL SURROGATE RECOVERIES FOR PESTICIDES ARE SATISFACTORY.

(6) MATRIX SPIKE/MATRIX SPIKE DUPLICATES

VOA: ALL WATER VOA MS/MSD % REC'S AND % RPD'S ARE WITHIN QC LIMITS FOR ECW 25.

S-VOA: SAMPLE ECW-29 WAS USED

2-CHLOROPHENOL WAS BELOW QC LIMITS FOR MS % REC. PHENOL, N-NITROSO-di-n-PROPYLAMINE AND 4-CHLORO-3-METHYLPHENOL WERE BELOW QC LIMITS IN THE MS AS WELL AS THE MSD.

Reviewed by: Robert Katzen

Phone: 312-353-2917

Date: 1/24/89.

DATA QUALIFIERS

Contractor: COMPUCHEM

Case 11111 / 4231F

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

MATRIX SPIKES - CONTINUED:

(S-VOA) THE RPD'S WERE ABOVE LIMITS FOR 1,4-DICHLOROBENZENE, N-NITROSODI-n-PROPYLAMINE, 1,2,4-TRICHLOROBENZENE AND PYRENE.

PESTICIDES: EPA SAMPLE ECW 27 HAD THE FOLLOWING MS AND MSD JUST BELOW QC LIMITS:

GAMMA-BHC
ALDRIN
DIELDRIN

ENDRIN WAS BELOW QC LIMITS FOR JUST THE MS % RECOVERY. WHILE THE RECOVERY DATA FOR DDT WAS UNAVAILABLE DUE TO MATRIX INTERFERENCE, THE COMPOUNDS LISTED ABOVE AS %REC. AND %RPD. OUTLIERS FOR S-VOA'S AND PESTICIDES ARE FLAGGED ESTIMATED (J) IN THE CORRESPONDING UNSPIKED SAMPLE.

RK 1/24/89

7) ~~8~~ INTERNAL STANDARDS PERFORMANCE

ALL INTERNAL STANDARDS PERFORMANCE DATA FOR VOA AND S-VOA ARE SATISFACTORY.

RK 1/24/89

(8) ~~9~~ COMPOUND IDENTIFICATION

GC/MS ANALYSIS WAS CARRIED OUT PROPERLY AND THE DATA REFLECT THE RESULTS OF THE ANALYSIS.

Reviewed by: Robert Katze

Phone: 312-353-2917

Date: 1/24/89.

DATA QUALIFIERS

Contractor: COMPMCHEM

Case 11111/423/E

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(a) FIELD DUPLICATES

ECW 27 AND ECW 30 ARE DUPLICATES AND ECW-31 IS A BLANK (FIELD).

VOA: METHYLENE CHLORIDE, CHLOROFORM AND 1,1,1-TRICHLOROETHANE WERE PRESENT IN BOTH DUPLICATES AT SIMILAR LEVELS. THE BLANK CONTAINED METHYLENE CHLORIDE, ACETONE, CHLOROFORM, BROMODICHLOROMETHANE, DIBROMOCHLOROMETHANE, TETRACHLOROETHENE AND ACROLEIN AT LEVELS JUST ABOVE OR AT THREIR RESPECTIVE CRQL'S. IT ALSO CONTAINED A TIC WHICH WAS FLAGGED ESTIMATED.

S-VOA: ECW 27 CONTAINED PHENOL BELOW ITS CRQL WHILE ECW 30 DID NOT.
THE FIELD BLANK CONTAINED AN UNKNOWN HYDROCARBON AS A TIC.

PESTICIDES: ECW 27 CONTAINED α- AND γ- BHC AND THEY WERE FLAGGED ESTIMATED (X).

(b) COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

THE CRQL'S HAVE BEEN ADJUSTED TO REFLECT ALL SAMPLE DILUTIONS AND CONCENTRATIONS. DETECTION LIMIT WERE IN CASE.

Reviewed by: Robert Kaiser
Phone: 312-353-2917
Date: 1/24/89.

DATA QUALIFIERS

Contractor: COMPUCHEM

Case 11111 / 4231F

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(11) SYSTEM PERFORMANCE

THE EC/MS WAS WELL USED AND THE RESULTS INTERPRETED WELL.

(12) ADDITIONAL CASE SPECIFIC PROBLEMS

THE CASE WAS WELL RUN AND NO MAJOR PROBLEMS WERE FOUND.

Reviewed by: Robert Kabzu

Phone: 312-353-2917

Date: 1/24/89.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 11111 / 4231 HE CONTRACTOR CompuChem

| Instrument # | Init. Cal. | | | Cont. Cal. | | | Cont. Cal. | | | Cont. Cal. | | | Cont. Cal. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DATE/TIME: | 1/9 20:58 | | | 1/22/89 0004 | | | | | | | | | | | |
| | RF | %RSD | * | RF | %D | * | RF | %D | * | RF | %D | * | RF | %D | * |
| Chloromethane | | | | | | | | | | | | | | | |
| Bromomethane | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | |
| Chloroethane | | | | | | | | | | | | | | | |
| Methylene Chloride | | | | | | | | | | | | | | | |
| Acetone | 0.139 | 50.3 | J | 0.083 | 33.1 | J | | | | | | | | | |
| Carbon Disulfide | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | | | | | | | | | | | | | | | |
| 1,1-Dichloroethene | | | | | | | | | | | | | | | |
| Trans-1,2-Dichloroethene | | | | | | | | | | | | | | | |
| Chloroform | | | | | | | | | | | | | | | |
| 2-Butanone | 0.006 | 9.1 | J/R | 0.005 | 16.7 | J/R | | | | | | | | | |
| 1,2-Dichloroethane | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | | | | | | | | | | | | | | | |
| Carbon Tetrachloride | | | | | | | | | | | | | | | |
| Vinyl Acetate | | | | | | | | | | | | | | | |
| Bromodichloromethane | | | | | | | | | | | | | | | |
| 1,2-Dichloropropane | | | | | | | | | | | | | | | |
| Trans-1,3-Dichloropropene | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | |
| Dibromochloromethane | | | | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | | | | | | | | | | | | | | | |
| 2-Chloroethylvinylether | | | | | | | | | | | | | | | |
| Bromoform | | | | | | | | | | | | | | | |
| 4-Methyl-2-Pentanone | | | | | | | | | | | | | | | |
| 2-Hexanone | 0.042 | 20.7 | J/R | 0.039 | 7.1 | J/R | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | |
| Chlorobenzene | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | |
| m-Xylene | | | | | | | | | | | | | | | |
| o/p-Xylene | | | | | | | | | | | | | | | |

AFFECTED SAMPLES:

1/GLK X12
ECW-25MS
ECW-25MSD

Reviewer's Initials/Date: 1/23/89

* These flags should be applied to the analytes on the sample data sheets.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
VOLATILE MSL COMPOUNDS

CASE/SAS # 11111 / 4231E CONTRACTOR CompuCHEM

| Instrument # 11 | Init. Cal. | | | Cont. Cal. | | | Cont. Cal. | | | Cont. Cal. | | | Cont. Cal. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DATE/TIME: | 12/16/88 | | | 12/17/88 0741 | | | 12/18/88 1601 | | | 12/18/88 1151 | | | | | |
| | RF | %RSD | * | RF | %D | * | RF | %D | * | RF | %D | * | RF | %D | * |
| Chloromethane | 2.672 | | | | | | 1.611 | 34.3 | J | 1.740 | 32.4 | J | | | |
| Bromomethane | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | |
| Chloroethane | | | | | | | | | | | | | | | |
| Methylene Chloride | | | | | | | | | | | | | | | |
| Acetone | 0.120 | | | 0.166 | 38.3 | J | 0.322 | 99.9 | J | 0.184 | 53.3 | J | | | |
| Carbon Disulfide | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | | | | | | | | | | | | | | | |
| 1,1-Dichloroethene | | | | | | | | | | | | | | | |
| Trans-1,2-Dichloroethene | | | | | | | | | | | | | | | |
| Chloroform | | | | | | | | | | | | | | | |
| 2-Butanone | 0.006 | 9.1 | J/R | 0.007 | 16.7 | J/R | 0.008 | 33.3 | J/R | 0.01 | | | | | |
| 1,2-Dichloroethane | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | | | | | | | | | | | | | | | |
| Carbon Tetrachloride | | | | | | | | | | | | | | | |
| Vinyl Acetate | | | | | | | | | | | | | | | |
| Bromodichloromethane | | | | | | | | | | | | | | | |
| 1,2-Dichloropropane | | | | | | | | | | | | | | | |
| Trans-1,3-Dichloropropene | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | |
| Dibromochloromethane | | | | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | | | | | | | | | | | | | | | |
| 2-Chloroethylvinylether | | | | | | | | | | | | | | | |
| Bromoform | | | | | | | | | | | | | | | |
| 4-Methyl-2-Pentanone | | | | | | | | | | | | | | | |
| 2-Hexanone | 0.049 | 16.1 | J/R | 0.051 | | | 0.053 | | | 0.046 | 2.0 | J/R | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | |
| Chlorobenzene | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | |
| m-Xylene | | | | | | | | | | | | | | | |
| o/p-Xylene | | | | | | | | | | | | | | | |

AFFECTED SAMPLES:

| | | |
|---|---|---|
| VBLKAD | VBLK HC | VBLK ST |
| ECW 25 | ECW 28 | ECW 30 |
| ECW 26 | ECW 29 | ECW 30RE |
| | ECW 27 | |

Reviewer's Initials/Date: RK. 1/23/89

* These flags should be applied to the analytes on the sample data sheets.

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
## CALIBRATION OUTLIERS
## SEMIVOLATILE HSL COMPOUNDS
(Page 1)

CASE/SAS # 11111/423/E CONTRACTOR Compuchem

| Instrument # 15 | Init. Cal. | | | Cont. Cal. | | | Cont. Cal. | | | Cont. Cal. | | | Cont. Cal. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DATE/TIME: | 11/1/88 | | | 12/19/88 0052 | | | 12/22/88 0844 | | | 12/24/88 1042 | | | | | |
| | RF | %RSD | * | RF | %D | * | RF | %D | * | RF | %D | * | RF | %D | * |
| Phenol | | | | | | | | | | | | | | | |
| bis(-2-Chloroethyl)Ether | 1.729 | | | 1.219 | 30.7 | J | 1.284 | 26.9 | J | 1.445 | | | | | |
| 2-Chlorophenol | | | | | | | | | | | | | | | |
| 1,3-Dichlorobenzene | | | | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | | | | | | | | | | | | |
| Benzyl Alcohol | 0.850 | | | 0.663 | | | 0.613 | 27.9 | J | 0.886 | | | | | |
| 1,2-Dichlorobenzene | | | | | | | | | | | | | | | |
| 2-Methylphenol | 1.259 | | | 0.934 | 25.9 | J | 0.882 | 29.9 | J | 1.116 | | | | | |
| bis(2-chloroisopropyl)Ether | 1.737 | | | 1.184 | 31.8 | J | 1.658 | 5.8 | | 0.879 | 49.4 | J | | | |
| 4-Methylphenol | | | | | | | | | | | | | | | |
| N-Nitroso-Di-n-Propylamine | 1.084 | | | 0.676 | 37.6 | J | 1.040 | | | 0.703 | 29.6 | J | | | |
| Hexachloroethane | 0.842 | | | 0.627 | 25.5 | J | 0.819 | | | 0.901 | | | | | |
| Nitrobenzene | 0.496 | | | 0.332 | 33.3 | J | 0.443 | | | 0.416 | | | | | |
| Isophorone | 0.832 | | | 0.596 | 31.2 | J | 0.713 | | | 0.659 | | | | | |
| 2-Nitrophenol | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | 0.356 | | | 0.209 | 44.7 | J | 0.226 | 29.7 | J | 0.227 | 40.0 | J | | | |
| Benzoic Acid | 0.139 | | | 0.164 | | | 0.089 | 39.6 | J | 0.194 | 39.6 | J | | | |
| bis(2-Chloroethoxy)Methane | 0.575 | | | 0.397 | 31.0 | J | 0.431 | 25.0 | | 0.497 | | | | | |
| 2,4-Dichlorophenol | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | |
| 4-Chloroaniline | 0.246 | | | 0.111 | 54.9 | J | 0.138 | 43.9 | J | 0.156 | 36.6 | J | | | |
| Hexachlorobutadiene | | | | | | | | | | | | | | | |
| 4-Chloro-3-Methylphenol | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | 0.636 | | | 0.537 | | | 0.691 | | | 0.254 | 60.1 | J | | | |
| Hexachlorocyclopentadiene | 0.344 | | | 0.178 | 54.8 | J | 0.241 | 30.5 | J | 0.39 | | | | | |
| 2,4,6-Trichlorophenol | | | | | | | | | | | | | | | |
| 2,4,5-Trichlorophenol | | | | | | | | | | | | | | | |
| 2-Chloronaphthalene | | | | | | | | | | | | | | | |
| 2-Nitroaniline | 0.443 | | | 0.296 | 33.2 | J | 0.472 | | | 0.342 | | | | | |
| Dimethyl Pnthalate | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | |
| 3-Nitroaniline | 0.218 | | | 0.262 | | | 0.249 | 31.7 | J | 0.34 | 46.0 | J | | | |
| Acenaphthene | | | | | | | | | | | | | | | |
| 2,4-Dinitrophenol | 0.103 | | | 0.121 | | | 0.133 | 29.1 | J | 0.177 | 71.8 | J | | | |
| 4-Nitrophenol | 0.222 | | | 0.160 | 27.9 | J | 0.240 | 30.6 | J | 0.217 | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | |

AFFECTED SAMPLES:

SBLK 17
ECW 25
ECW 27
ECW 30
ECW 31
ECW 29

SBLK-72
ECW-28RE

ECW-29ms
ECW-29msD

Reviewer Initials/Date: RK 1/24/89

* These flags should be applied to the analytes on the sample data sheets.

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
## CALIBRATION OUTLIERS
## SEMIVOLATILE HSL COMPOUNDS
Page 2

CASE/SAS # 11111 / 4231E CONTRACTOR COMPUCHEM,

| Instrument # 15 | Init. Cal. | | | Cont. Cal. | | | Cont. Cal. | | | Cont. Cal. | | | Cont. Cal. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DATE/TIME: | 11/11/88 | | | 12/19/88 0059 | | | 12/27/88 0514 | | | 12/29/88 1042 | | | | | |
| | RF | %RSD | * | RF | %D | * | RF | %D | * | RF | %D | * | RF | %D | * |
| 2,4-Dinitrotoluene | 0.313 | | | 0.315 | | | 0.342 | | | 0.419 | 33.9 | J | | | |
| 2,6-Dinitrotoluene | 0.236 | | | 0.230 | | | 0.243 | | | 0.307 | 30.1 | J | | | |
| Diethylphthalate | 1.095 | | | 1.655 | | | 1.383 | 26.5 | J | 1.442 | 31.7 | J | | | |
| 4-Chlorophenyl-phenylether | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | |
| 4-Nitroaniline | 0.117 | | | 0.245 | 53.8 | J | 0.159 | 35.9 | J | 0.213 | 82.1 | J | | | |
| 4,6-Dinitro-2-Methylphenol | 0.095 | | | 0.169 | | | 0.112 | | | 0.161 | 64.3 | J | | | |
| N-Nitrosodiphenylamine | | | | | | | | | | | | | | | |
| 4-Bromophenyl-phenylether | 0.234 | | | 0.172 | 26.5 | J | 0.245 | | | 0.242 | | | | | |
| Hexachlorobenzene | 0.336 | | | 0.225 | 33.0 | J | 0.359 | | | 0.312 | | | | | |
| Pentachlorophenol | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | |
| Di-n-Butylphthalate | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | |
| Butylbenzylphthalate | | | | | | | | | | | | | | | |
| Benzo(a)Anthracene | 0.824 | | | 0.803 | | | 1.071 | 33.2 | J | 1.049 | 30.5 | J | | | |
| bis(2-Ethylhexyl)Phthalate | 0.499 | | | 0.571 | | | 0.647 | 29.7 | J | 0.554 | | | | | |
| Chrysene | 0.926 | | | 1.320 | 42.6 | J | 1.034 | | | 1.032 | | | | | |
| Di-n-Octyl Phthalate | | | | | | | | | | | | | | | |
| Benzo(b)Fluoranthene | 0.967 | | | 1.278 | 32.2 | J | 1.017 | | | 1.005 | | | | | |
| Benzo(k)Fluoranthene | 0.816 | | | 1.278 | 56.6 | J | 1.017 | | | 1.005 | | | | | |
| Benzo(a)Pyrene | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)Pyrene | 0.778 | | | 1.005 | 29.2 | J | 1.257 | 61.6 | J | 1.263 | 62.3 | J | | | |
| Dibenz(a,h)Anthracene | 0.659 | | | 0.740 | | | 1.025 | 56.0 | J | 1.021 | 48.2 | J | | | |
| Benzo(g,h,i) Perylene | 0.722 | | | 0.952 | 31.9 | J | 1.045 | 44.7 | J | 1.025 | 42.0 | J | | | |

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: RK. 1/24/89.

KW1

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW25

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235879

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN035879A11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ___ Date Analyzed: 12/17/88

Column: (pack/cap) PACK Dilution Factor: BJ 1-12-89 ~~4.0~~ 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 2 | U |
| 67-64-1 | Acetone | 2 | U |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 0.9 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | U |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 1 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 20 | U |
| 107-13-1 | Acrylonitrile | 26 | U |

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW25

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235879

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN035879A11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/17/88

Column (pack/cap) PACK Dilution Factor: BJA 1-12-89 ~~4.0~~ 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW26 KW2

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235889

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN035889A11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/17/88

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 BAA 1-12-89

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 2 | U |
| 67-64-1 | Acetone | 4 | ~~B~~ U RK 1/24/89 |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 0.9 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | U |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 1 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 20 | U |
| 107-13-1 | Acrylonitrile | 26 | U |

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW26

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235889

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN035889A11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/17/88

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 BDA 1-12-89

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. RW3

ECW27

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235890

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR035890C11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 RH 1-12-89

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 1 | J |
| 67-64-1 | Acetone | 2 | U |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 1 | |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | J |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 1 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 20 | U |
| 107-13-1 | Acrylonitrile | 26 | U |

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW27

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235890

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR035890C11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 BJ 1-12-89

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW30

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235893

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR035893A11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 2 | |
| 67-64-1 | Acetone | 2 | U |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 1 | |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 3 | |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 1 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 20 | U |
| 107-13-1 | Acrylonitrile | 26 | U |

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW30

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235893

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR035893A11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 1-12-89

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. KW4

ECW28

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235891

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN035891B11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/18/88

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 2 | |
| 67-64-1 | Acetone | 3 | ~~B~~ U |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 0.9 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | U |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 1 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 20 | U |
| 107-13-1 | Acrylonitrile | 26 | U |

RK 1/24/89

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW28

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235891

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN035891B11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/18/88

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 DAA 1-12-89

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW29

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235892

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR035892C11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 4 | |
| 67-64-1 | Acetone | 21 | ~~B~~ U |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 0.9 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | U |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 1 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 20 | U |
| 107-13-1 | Acrylonitrile | 26 | U |

RK 1/24/89.

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW29

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235892

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR035892C11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column (pack/cap) PACK Dilution Factor: KJP 1-12-89 ~~4.0~~ 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW31 BLK

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235894

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR035894C11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 SJA 1-12-89

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 2 | |
| 67-64-1 | Acetone | 2 | ~~B~~ U RK 1/24/89. |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 6 | |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | U |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 3 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | J |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 7 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 1 | J |
| 107-13-1 | Acrylonitrile | 26 | U |

FORM I VOA 1/87 Rev.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW31

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235894

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR035894C11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. 110-54-3 | HEXANE | 5.23 | 1.0 | J |

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW25

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235879

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035879C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 2 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 2 | U |
| 95-57-8 | 2-Chlorophenol | 2 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 2 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 2 | U |
| 100-51-6 | Benzyl Alcohol | 2 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 3 | U |
| 95-48-7 | 2-Methylphenol | 1 | U |
| 39638-32-9 | bis(2-Chloroisopropyl)Ether | 3 | U |
| 106-44-5 | 4-Methylphenol | 1 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 2 | U |
| 67-72-1 | Hexachloroethane | 2 | U |
| 98-95-3 | Nitrobenzene | 3 | U |
| 78-59-1 | Isophorone | 3 | U |
| 88-75-5 | 2-Nitrophenol | 2 | U |
| 105-67-9 | 2,4-Dimethylphenol | 2 | U |
| 65-85-0 | Benzoic Acid | 20 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 3 | U |
| 120-83-2 | 2,4-Dichlorophenol | 2 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 2 | U |
| 91-20-3 | Naphthalene | 2 | U |
| 106-47-8 | 4-Chloroaniline | 2 | U |
| 87-68-3 | Hexachlorobutadiene | 3 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 2 | U |
| 91-57-6 | 2-Methylnaphthalene | 2 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 2 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 2 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 2 | U |
| 91-58-7 | 2-Chloronaphthalene | 2 | U |
| 88-74-4 | 2-Nitroaniline | 1 | U |
| 131-11-3 | Dimethyl Phthalate | 2 | U |
| 208-96-8 | Acenaphthylene | 2 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 1 | U |

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW25

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235879

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035879C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 3 | U |
| 83-32-9 | Acenaphthene | 2 | U |
| 51-28-5 | 2,4-Dinitrophenol | 15 | U |
| 100-02-7 | 4-Nitrophenol | 2 | U |
| 132-64-9 | Dibenzofuran | 1 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 1 | U |
| 84-66-2 | Diethylphthalate | 1 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1 | U |
| 86-73-7 | Fluorene | 1 | U |
| 100-01-6 | 4-Nitroaniline | 3 | U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 15 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 2 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 2 | U |
| 118-74-1 | Hexachlorobenzene | 2 | U |
| 87-86-5 | Pentachlorophenol | 2 | U |
| 85-01-8 | Phenanthrene | 1 | U |
| 120-12-7 | Anthracene | 3 | U |
| 84-74-2 | Di-n-Butylphthalate | 2 | U |
| 206-44-0 | Fluoranthene | 2 | U |
| 129-00-0 | Pyrene | 2 | U |
| 85-68-7 | Butylbenzylphthalate | 4 | U |
| 56-55-3 | Benzo(a)Anthracene | 2 | U |
| 218-01-9 | Chrysene | 2 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 2 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 2 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 2 | U |
| 50-32-8 | Benzo(a)Pyrene | 2 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 4 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 3 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 4 | U |

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW25

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235879

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035879C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW26

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235889

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GJ035889C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 2 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 2 | U |
| 95-57-8 | 2-Chlorophenol | 2 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 2 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 2 | U |
| 100-51-6 | Benzyl Alcohol | 2 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 3 | U |
| 95-48-7 | 2-Methylphenol | 1 | U |
| 39638-32-9 | bis(2-Chloroisopropyl)Ether | 3 | U |
| 106-44-5 | 4-Methylphenol | 1 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 2 | U |
| 67-72-1 | Hexachloroethane | 2 | U |
| 98-95-3 | Nitrobenzene | 3 | U |
| 78-59-1 | Isophorone | 3 | U |
| 88-75-5 | 2-Nitrophenol | 2 | U |
| 105-67-9 | 2,4-Dimethylphenol | 2 | U |
| 65-85-0 | Benzoic Acid | 20 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 3 | U |
| 120-83-2 | 2,4-Dichlorophenol | 2 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 2 | U |
| 91-20-3 | Naphthalene | 2 | U |
| 106-47-8 | 4-Chloroaniline | 2 | U |
| 87-68-3 | Hexachlorobutadiene | 3 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 2 | U |
| 91-57-6 | 2-Methylnaphthalene | 2 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 2 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 2 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 2 | U |
| 91-58-7 | 2-Chloronaphthalene | 2 | U |
| 88-74-4 | 2-Nitroaniline | 1 | U |
| 131-11-3 | Dimethyl Phthalate | 2 | U |
| 208-96-8 | Acenaphthylene | 2 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 1 | U |

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1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW26

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235889

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GJ035889C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 3 | U |
| 83-32-9 | Acenaphthene | 2 | U |
| 51-28-5 | 2,4-Dinitrophenol | 15 | U |
| 100-02-7 | 4-Nitrophenol | 2 | U |
| 132-64-9 | Dibenzofuran | 1 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 1 | U |
| 84-66-2 | Diethylphthalate | 1 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1 | U |
| 86-73-7 | Fluorene | 1 | U |
| 100-01-6 | 4-Nitroaniline | 3 | U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 15 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 2 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 2 | U |
| 118-74-1 | Hexachlorobenzene | 2 | U |
| 87-86-5 | Pentachlorophenol | 2 | U |
| 85-01-8 | Phenanthrene | 1 | U |
| 120-12-7 | Anthracene | 3 | U |
| 84-74-2 | Di-n-Butylphthalate | 2 | U |
| 206-44-0 | Fluoranthene | 2 | U |
| 129-00-0 | Pyrene | 2 | U |
| 85-68-7 | Butylbenzylphthalate | 4 | U |
| 56-55-3 | Benzo(a)Anthracene | 2 | U |
| 218-01-9 | Chrysene | 2 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 2 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 2 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 2 | U |
| 50-32-8 | Benzo(a)Pyrene | 2 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 4 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 3 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 4 | U |

(1) - Cannot be separated from Diphenylamine

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW26

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235889

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GJ035889C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW27

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235890

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035890C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 1 | J |
| 111-44-4 | bis(2-Chloroethyl)Ether | 2 | U |
| 95-57-8 | 2-Chlorophenol | 2 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 2 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 2 | U |
| 100-51-6 | Benzyl Alcohol | 2 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 3 | U |
| 95-48-7 | 2-Methylphenol | 1 | U |
| 39638-32-9 | bis(2-Chloroisopropyl)Ether | 3 | U |
| 106-44-5 | 4-Methylphenol | 1 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 2 | U |
| 67-72-1 | Hexachloroethane | 2 | U |
| 98-95-3 | Nitrobenzene | 3 | U |
| 78-59-1 | Isophorone | 3 | U |
| 88-75-5 | 2-Nitrophenol | 2 | U |
| 105-67-9 | 2,4-Dimethylphenol | 2 | U |
| 65-85-0 | Benzoic Acid | 20 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 3 | U |
| 120-83-2 | 2,4-Dichlorophenol | 2 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 2 | U |
| 91-20-3 | Naphthalene | 2 | U |
| 106-47-8 | 4-Chloroaniline | 2 | U |
| 87-68-3 | Hexachlorobutadiene | 3 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 2 | U |
| 91-57-6 | 2-Methylnaphthalene | 2 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 2 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 2 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 2 | U |
| 91-58-7 | 2-Chloronaphthalene | 2 | U |
| 88-74-4 | 2-Nitroaniline | 1 | U |
| 131-11-3 | Dimethyl Phthalate | 2 | U |
| 208-96-8 | Acenaphthylene | 2 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 1 | U |

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW27

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235890

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035890C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 3 | U |
| 83-32-9 | Acenaphthene | 2 | U |
| 51-28-5 | 2,4-Dinitrophenol | 15 | U |
| 100-02-7 | 4-Nitrophenol | 2 | U |
| 132-64-9 | Dibenzofuran | 1 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 1 | U |
| 84-66-2 | Diethylphthalate | 1 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1 | U |
| 86-73-7 | Fluorene | 1 | U |
| 100-01-6 | 4-Nitroaniline | 3 | U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 15 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 2 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 2 | U |
| 118-74-1 | Hexachlorobenzene | 2 | U |
| 87-86-5 | Pentachlorophenol | 2 | U |
| 85-01-8 | Phenanthrene | 1 | U |
| 120-12-7 | Anthracene | 3 | U |
| 84-74-2 | Di-n-Butylphthalate | 2 | U |
| 206-44-0 | Fluoranthene | 2 | U |
| 129-00-0 | Pyrene | 2 | U |
| 85-68-7 | Butylbenzylphthalate | 4 | U |
| 56-55-3 | Benzo(a)Anthracene | 2 | U |
| 218-01-9 | Chrysene | 2 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 2 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 2 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 2 | U |
| 50-32-8 | Benzo(a)Pyrene | 2 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 4 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 3 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 4 | U |

(1) - Cannot be separated from Diphenylamine

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW27

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235890

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035890C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW30

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235893

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035893A15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 2 | |
| 111-44-4 | bis(2-Chloroethyl)Ether | 2 | U |
| 95-57-8 | 2-Chlorophenol | 2 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 2 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 2 | U |
| 100-51-6 | Benzyl Alcohol | 2 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 3 | U |
| 95-48-7 | 2-Methylphenol | 1 | U |
| 39638-32-9 | bis(2-Chloroisopropyl)Ether | 3 | U |
| 106-44-5 | 4-Methylphenol | 1 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 2 | U |
| 67-72-1 | Hexachloroethane | 2 | U |
| 98-95-3 | Nitrobenzene | 3 | U |
| 78-59-1 | Isophorone | 3 | U |
| 88-75-5 | 2-Nitrophenol | 2 | U |
| 105-67-9 | 2,4-Dimethylphenol | 2 | U |
| 65-85-0 | Benzoic Acid | 20 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 3 | U |
| 120-83-2 | 2,4-Dichlorophenol | 2 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 2 | U |
| 91-20-3 | Naphthalene | 2 | U |
| 106-47-8 | 4-Chloroaniline | 2 | U |
| 87-68-3 | Hexachlorobutadiene | 3 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 2 | U |
| 91-57-6 | 2-Methylnaphthalene | 2 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 2 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 2 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 2 | U |
| 91-58-7 | 2-Chloronaphthalene | 2 | U |
| 88-74-4 | 2-Nitroaniline | 1 | U |
| 131-11-3 | Dimethyl Phthalate | 2 | U |
| 208-96-8 | Acenaphthylene | 2 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 1 | U |

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW30

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235893

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035893A15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 3 | U |
| 83-32-9 | Acenaphthene | 2 | U |
| 51-28-5 | 2,4-Dinitrophenol | 15 | U |
| 100-02-7 | 4-Nitrophenol | 2 | U |
| 132-64-9 | Dibenzofuran | 1 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 1 | U |
| 84-66-2 | Diethylphthalate | 1 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1 | U |
| 86-73-7 | Fluorene | 1 | U |
| 100-01-6 | 4-Nitroaniline | 3 | U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 15 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 2 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 2 | U |
| 118-74-1 | Hexachlorobenzene | 2 | U |
| 87-86-5 | Pentachlorophenol | 2 | U |
| 85-01-8 | Phenanthrene | 1 | U |
| 120-12-7 | Anthracene | 3 | U |
| 84-74-2 | Di-n-Butylphthalate | 2 | U |
| 206-44-0 | Fluoranthene | 2 | U |
| 129-00-0 | Pyrene | 2 | U |
| 85-68-7 | Butylbenzylphthalate | 4 | U |
| 56-55-3 | Benzo(a)Anthracene | 2 | U |
| 218-01-9 | Chrysene | 2 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 2 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 2 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 2 | U |
| 50-32-8 | Benzo(a)Pyrene | 2 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 4 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 3 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 4 | U |

(1) - Cannot be separated from Diphenylamine

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW30

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235893

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035893A15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW28

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235891

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035891C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 2 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 2 | U |
| 95-57-8 | 2-Chlorophenol | 2 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 2 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 2 | U |
| 100-51-6 | Benzyl Alcohol | 2 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 3 | U |
| 95-48-7 | 2-Methylphenol | 1 | U |
| 39638-32-9 | bis(2-Chloroisopropyl)Ether | 3 | U |
| 106-44-5 | 4-Methylphenol | 1 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 2 | U |
| 67-72-1 | Hexachloroethane | 2 | U |
| 98-95-3 | Nitrobenzene | 3 | U |
| 78-59-1 | Isophorone | 3 | U |
| 88-75-5 | 2-Nitrophenol | 2 | U |
| 105-67-9 | 2,4-Dimethylphenol | 2 | U |
| 65-85-0 | Benzoic Acid | 20 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 3 | U |
| 120-83-2 | 2,4-Dichlorophenol | 2 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 2 | U |
| 91-20-3 | Naphthalene | 2 | U |
| 106-47-8 | 4-Chloroaniline | 2 | U |
| 87-68-3 | Hexachlorobutadiene | 3 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 2 | U |
| 91-57-6 | 2-Methylnaphthalene | 2 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 2 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 2 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 2 | U |
| 91-58-7 | 2-Chloronaphthalene | 2 | U |
| 88-74-4 | 2-Nitroaniline | 1 | U |
| 131-11-3 | Dimethyl Phthalate | 2 | U |
| 208-96-8 | Acenaphthylene | 2 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 1 | U |

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW28

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235891

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035891C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 3 | U |
| 83-32-9 | Acenaphthene | 2 | U |
| 51-28-5 | 2,4-Dinitrophenol | 15 | U |
| 100-02-7 | 4-Nitrophenol | 2 | U |
| 132-64-9 | Dibenzofuran | 1 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 1 | U |
| 84-66-2 | Diethylphthalate | 1 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1 | U |
| 86-73-7 | Fluorene | 1 | U |
| 100-01-6 | 4-Nitroaniline | 3 | U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 15 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 2 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 2 | U |
| 118-74-1 | Hexachlorobenzene | 2 | U |
| 87-86-5 | Pentachlorophenol | 2 | U |
| 85-01-8 | Phenanthrene | 1 | U |
| 120-12-7 | Anthracene | 3 | U |
| 84-74-2 | Di-n-Butylphthalate | 2 | U |
| 206-44-0 | Fluoranthene | 2 | U |
| 129-00-0 | Pyrene | 2 | U |
| 85-68-7 | Butylbenzylphthalate | 4 | U |
| 56-55-3 | Benzo(a)Anthracene | 2 | U |
| 218-01-9 | Chrysene | 2 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 2 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 2 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 2 | U |
| 50-32-8 | Benzo(a)Pyrene | 2 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 4 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 3 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 4 | U |

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW28

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235891

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035891C15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN | 6.02 | 16 | J |

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW29

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235892

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GJ035892A15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 1 | J |
| 111-44-4 | bis(2-Chloroethyl)Ether | 2 | U |
| 95-57-8 | 2-Chlorophenol | 2 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 2 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 2 | U |
| 100-51-6 | Benzyl Alcohol | 2 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 3 | U |
| 95-48-7 | 2-Methylphenol | 1 | U |
| 39638-32-9 | bis(2-Chloroisopropyl)Ether | 3 | U |
| 106-44-5 | 4-Methylphenol | 1 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 2 | U |
| 67-72-1 | Hexachloroethane | 2 | U |
| 98-95-3 | Nitrobenzene | 3 | U |
| 78-59-1 | Isophorone | 3 | U |
| 88-75-5 | 2-Nitrophenol | 2 | U |
| 105-67-9 | 2,4-Dimethylphenol | 2 | U |
| 65-85-0 | Benzoic Acid | 20 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 3 | U |
| 120-83-2 | 2,4-Dichlorophenol | 2 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 2 | U |
| 91-20-3 | Naphthalene | 2 | U |
| 106-47-8 | 4-Chloroaniline | 2 | U |
| 87-68-3 | Hexachlorobutadiene | 3 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 2 | U |
| 91-57-6 | 2-Methylnaphthalene | 2 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 2 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 2 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 2 | U |
| 91-58-7 | 2-Chloronaphthalene | 2 | U |
| 88-74-4 | 2-Nitroaniline | 1 | U |
| 131-11-3 | Dimethyl Phthalate | 2 | U |
| 208-96-8 | Acenaphthylene | 2 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 1 | U |

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1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW29

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235892

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GJ035892A15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 3 | U |
| 83-32-9 | Acenaphthene | 2 | U |
| 51-28-5 | 2,4-Dinitrophenol | 15 | U |
| 100-02-7 | 4-Nitrophenol | 2 | U |
| 132-64-9 | Dibenzofuran | 1 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 1 | U |
| 84-66-2 | Diethylphthalate | 1 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1 | U |
| 86-73-7 | Fluorene | 1 | U |
| 100-01-6 | 4-Nitroaniline | 3 | U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 15 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 2 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 2 | U |
| 118-74-1 | Hexachlorobenzene | 2 | U |
| 87-86-5 | Pentachlorophenol | 2 | U |
| 85-01-8 | Phenanthrene | 1 | U |
| 120-12-7 | Anthracene | 3 | U |
| 84-74-2 | Di-n-Butylphthalate | 2 | U |
| 206-44-0 | Fluoranthene | 2 | U |
| 129-00-0 | Pyrene | 2 | U |
| 85-68-7 | Butylbenzylphthalate | 4 | U |
| 56-55-3 | Benzo(a)Anthracene | 2 | U |
| 218-01-9 | Chrysene | 2 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 2 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 2 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 2 | U |
| 50-32-8 | Benzo(a)Pyrene | 2 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 4 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 3 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 4 | U |

(1) - Cannot be separated from Diphenylamine

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW29

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235892

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GJ035892A15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW31

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235894

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035894A15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 2 | |
| 111-44-4 | bis(2-Chloroethyl)Ether | 2 | U |
| 95-57-8 | 2-Chlorophenol | 2 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 2 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 2 | U |
| 100-51-6 | Benzyl Alcohol | 2 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 3 | U |
| 95-48-7 | 2-Methylphenol | 1 | U |
| 39638-32-9 | bis(2-Chloroisopropyl)Ether | 3 | U |
| 106-44-5 | 4-Methylphenol | 1 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 2 | U |
| 67-72-1 | Hexachloroethane | 2 | U |
| 98-95-3 | Nitrobenzene | 3 | U |
| 78-59-1 | Isophorone | 3 | U |
| 88-75-5 | 2-Nitrophenol | 2 | U |
| 105-67-9 | 2,4-Dimethylphenol | 2 | U |
| 65-85-0 | Benzoic Acid | 20 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 3 | U |
| 120-83-2 | 2,4-Dichlorophenol | 2 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 2 | U |
| 91-20-3 | Naphthalene | 2 | U |
| 106-47-8 | 4-Chloroaniline | 2 | U |
| 87-68-3 | Hexachlorobutadiene | 3 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 2 | U |
| 91-57-6 | 2-Methylnaphthalene | 2 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 2 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 2 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 2 | U |
| 91-58-7 | 2-Chloronaphthalene | 2 | U |
| 88-74-4 | 2-Nitroaniline | 1 | U |
| 131-11-3 | Dimethyl Phthalate | 2 | U |
| 208-96-8 | Acenaphthylene | 2 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 1 | U |

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW31

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235894

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035894A15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 3 | U |
| 83-32-9 | Acenaphthene | 2 | U |
| 51-28-5 | 2,4-Dinitrophenol | 15 | U |
| 100-02-7 | 4-Nitrophenol | 2 | U |
| 132-64-9 | Dibenzofuran | 1 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 1 | U |
| 84-66-2 | Diethylphthalate | 1 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1 | U |
| 86-73-7 | Fluorene | 1 | U |
| 100-01-6 | 4-Nitroaniline | 3 | U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 15 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 2 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 2 | U |
| 118-74-1 | Hexachlorobenzene | 2 | U |
| 87-86-5 | Pentachlorophenol | 2 | U |
| 85-01-8 | Phenanthrene | 1 | U |
| 120-12-7 | Anthracene | 3 | U |
| 84-74-2 | Di-n-Butylphthalate | 2 | U |
| 206-44-0 | Fluoranthene | 2 | U |
| 129-00-0 | Pyrene | 2 | U |
| 85-68-7 | Butylbenzylphthalate | 4 | U |
| 56-55-3 | Benzo(a)Anthracene | 2 | U |
| 218-01-9 | Chrysene | 2 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 2 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 2 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 2 | U |
| 50-32-8 | Benzo(a)Pyrene | 2 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 4 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 3 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 4 | U |

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW31

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235894

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035894A15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN SUBST. HYDROCARBON | 10.87 | 12 | J |

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW25

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235879

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/16/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.50

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 26. | ~~X~~ U |
| 319-85-7 | beta-BHC | 25. | U |
| 319-86-8 | delta-BHC | 25. | U |
| 58-89-9 | gamma-BHC (Lindane) | 25. | U |
| 76-44-8 | Heptachlor | 25. | U |
| 309-00-2 | Aldrin | 25. | U |
| 1024-57-3 | Heptachlor epoxide | 25. | U |
| 959-98-8 | Endosulfan I | 25. | U |
| 60-57-1 | Dieldrin | 50. | U |
| 72-55-9 | 4,4'-DDE | 50. | U |
| 72-20-8 | Endrin | 50. | U |
| 33213-65-9 | Endosulfan II | 50. | U |
| 72-54-8 | 4,4'-DDD | 50. | U |
| 1031-07-8 | Endosulfan sulfate | 50. | U |
| 50-29-3 | 4,4'-DDT | 50. | U |
| 72-43-5 | Methoxychlor | 250 | U |
| 53494-70-5 | Endrin ketone | 50. | U |
| 5103-71-9 | alpha-Chlordane | 250 | U |
| 5103-74-2 | gamma-Chlordane | 250 | U |
| 8001-35-2 | Toxaphene | 500 | U |
| 12674-11-2 | Aroclor-1016 | 250 | U |
| 11104-28-2 | Aroclor-1221 | 250 | U |
| 11141-16-5 | Aroclor-1232 | 250 | U |
| 53469-21-9 | Aroclor-1242 | 250 | U |
| 12672-29-6 | Aroclor-1248 | 250 | U |
| 11097-69-1 | Aroclor-1254 | 500 | U |
| 11096-82-5 | Aroclor-1260 | 500 | U |

Blank contamination - see lab narrative
2/6/89

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW26

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235889

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/16/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/21/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.10

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 30. | ~~X~~ U |
| 319-85-7 | beta-BHC | 5.0 | U |
| 319-86-8 | delta-BHC | 5.0 | U |
| 58-89-9 | gamma-BHC (Lindane) | 30. | ~~X~~ U |
| 76-44-8 | Heptachlor | 5.0 | U |
| 309-00-2 | Aldrin | 5.0 | U |
| 1024-57-3 | Heptachlor epoxide | 5.0 | U |
| 959-98-8 | Endosulfan I | 5.0 | U |
| 60-57-1 | Dieldrin | 10. | U |
| 72-55-9 | 4,4'-DDE | 10. | U |
| 72-20-8 | Endrin | 10. | U |
| 33213-65-9 | Endosulfan II | 10. | U |
| 72-54-8 | 4,4'-DDD | 10. | U |
| 1031-07-8 | Endosulfan sulfate | 10. | U |
| 50-29-3 | 4,4'-DDT | 10. | U |
| 72-43-5 | Methoxychlor | 50. | U |
| 53494-70-5 | Endrin ketone | 10. | U |
| 5103-71-9 | alpha-Chlordane | 50. | U |
| 5103-74-2 | gamma-Chlordane | 50. | U |
| 8001-35-2 | Toxaphene | 100 | U |
| 12674-11-2 | Aroclor-1016 | 50. | U |
| 11104-28-2 | Aroclor-1221 | 50. | U |
| 11141-16-5 | Aroclor-1232 | 50. | U |
| 53469-21-9 | Aroclor-1242 | 50. | U |
| 12672-29-6 | Aroclor-1248 | 50. | U |
| 11097-69-1 | Aroclor-1254 | 100 | U |
| 11096-82-5 | Aroclor-1260 | 100 | U |

Blank contamination per lab narrative [illegible] 2/6/89

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW27

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235890

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/16/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/21/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.10

CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 27. | ~~X~~ U |
| 319-85-7 | beta-BHC | 5.0 | U |
| 319-86-8 | delta-BHC | 5.0 | U |
| 58-89-9 | gamma-BHC (Lindane) | 26. | ~~X~~ U |
| 76-44-8 | Heptachlor | 5.0 | U |
| 309-00-2 | Aldrin | 5.0 | U |
| 1024-57-3 | Heptachlor epoxide | 5.0 | U |
| 959-98-8 | Endosulfan I | 5.0 | U |
| 60-57-1 | Dieldrin | 10. | U |
| 72-55-9 | 4,4'-DDE | 10. | U |
| 72-20-8 | Endrin | 10. | U |
| 33213-65-9 | Endosulfan II | 10. | U |
| 72-54-8 | 4,4'-DDD | 10. | U |
| 1031-07-8 | Endosulfan sulfate | 10. | U |
| 50-29-3 | 4,4'-DDT | 10. | U |
| 72-43-5 | Methoxychlor | 50. | U |
| 53494-70-5 | Endrin ketone | 10. | U |
| 5103-71-9 | alpha-Chlordane | 50. | U |
| 5103-74-2 | gamma-Chlordane | 50. | U |
| 8001-35-2 | Toxaphene | 100 | U |
| 12674-11-2 | Aroclor-1016 | 50. | U |
| 11104-28-2 | Aroclor-1221 | 50. | U |
| 11141-16-5 | Aroclor-1232 | 50. | U |
| 53469-21-9 | Aroclor-1242 | 50. | U |
| 12672-29-6 | Aroclor-1248 | 50. | U |
| 11097-69-1 | Aroclor-1254 | 100 | U |
| 11096-82-5 | Aroclor-1260 | 100 | U |

U Blank contamination per lab narrative
2/6/89

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW30

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235893

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. _____ dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/30/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.10

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 5.0 | U |
| 319-85-7 | beta-BHC | 5.0 | U |
| 319-86-8 | delta-BHC | 5.0 | U |
| 58-89-9 | gamma-BHC (Lindane) | 5.0 | U |
| 76-44-8 | Heptachlor | 5.0 | U |
| 309-00-2 | Aldrin | 5.0 | U |
| 1024-57-3 | Heptachlor epoxide | 5.0 | U |
| 959-98-8 | Endosulfan I | 5.0 | U |
| 60-57-1 | Dieldrin | 10. | U |
| 72-55-9 | 4,4'-DDE | 10. | U |
| 72-20-8 | Endrin | 10. | U |
| 33213-65-9 | Endosulfan II | 10. | U |
| 72-54-8 | 4,4'-DDD | 10. | U |
| 1031-07-8 | Endosulfan sulfate | 10. | U |
| 50-29-3 | 4,4'-DDT | 10. | U |
| 72-43-5 | Methoxychlor | 50. | U |
| 53494-70-5 | Endrin ketone | 10. | U |
| 5103-71-9 | alpha-Chlordane | 50. | U |
| 5103-74-2 | gamma-Chlordane | 50. | U |
| 8001-35-2 | Toxaphene | 100 | U |
| 12674-11-2 | Aroclor-1016 | 50. | U |
| 11104-28-2 | Aroclor-1221 | 50. | U |
| 11141-16-5 | Aroclor-1232 | 50. | U |
| 53469-21-9 | Aroclor-1242 | 50. | U |
| 12672-29-6 | Aroclor-1248 | 50. | U |
| 11097-69-1 | Aroclor-1254 | 100 | U |
| 11096-82-5 | Aroclor-1260 | 100 | U |

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW28

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235891

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/16/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/21/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.10

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 18. | ~~X~~ U |
| 319-85-7 | beta-BHC | 5.0 | U |
| 319-86-8 | delta-BHC | 5.0 | U |
| 58-89-9 | gamma-BHC (Lindane) | 17. | ~~X~~ U |
| 76-44-8 | Heptachlor | 5.0 | U |
| 309-00-2 | Aldrin | 5.0 | U |
| 1024-57-3 | Heptachlor epoxide | 5.0 | U |
| 959-98-8 | Endosulfan I | 5.0 | U |
| 60-57-1 | Dieldrin | 10. | U |
| 72-55-9 | 4,4'-DDE | 10. | U |
| 72-20-8 | Endrin | 10. | U |
| 33213-65-9 | Endosulfan II | 10. | U |
| 72-54-8 | 4,4'-DDD | 10. | U |
| 1031-07-8 | Endosulfan sulfate | 10. | U |
| 50-29-3 | 4,4'-DDT | 10. | U |
| 72-43-5 | Methoxychlor | 50. | U |
| 53494-70-5 | Endrin ketone | 10. | U |
| 5103-71-9 | alpha-Chlordane | 50. | U |
| 5103-74-2 | gamma-Chlordane | 50. | U |
| 8001-35-2 | Toxaphene | 100 | U |
| 12674-11-2 | Aroclor-1016 | 50. | U |
| 11104-28-2 | Aroclor-1221 | 50. | U |
| 11141-16-5 | Aroclor-1232 | 50. | U |
| 53469-21-9 | Aroclor-1242 | 50. | U |
| 12672-29-6 | Aroclor-1248 | 50. | U |
| 11097-69-1 | Aroclor-1254 | 100 | U |
| 11096-82-5 | Aroclor-1260 | 100 | U |

Blank contamination - U per lab narrative
2/6/89

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW29

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235892

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/16/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/21/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.10

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 29. | ~~X~~ u |
| 319-85-7 | beta-BHC | 5.0 | U |
| 319-86-8 | delta-BHC | 5.0 | U |
| 58-89-9 | gamma-BHC (Lindane) | 31. | ~~X~~ u |
| 76-44-8 | Heptachlor | 5.0 | U |
| 309-00-2 | Aldrin | 5.0 | U |
| 1024-57-3 | Heptachlor epoxide | 5.0 | U |
| 959-98-8 | Endosulfan I | 5.0 | U |
| 60-57-1 | Dieldrin | 10. | U |
| 72-55-9 | 4,4'-DDE | 10. | U |
| 72-20-8 | Endrin | 10. | U |
| 33213-65-9 | Endosulfan II | 10. | U |
| 72-54-8 | 4,4'-DDD | 10. | U |
| 1031-07-8 | Endosulfan sulfate | 10. | U |
| 50-29-3 | 4,4'-DDT | 10. | U |
| 72-43-5 | Methoxychlor | 50. | U |
| 53494-70-5 | Endrin ketone | 10. | U |
| 5103-71-9 | alpha-Chlordane | 50. | U |
| 5103-74-2 | gamma-Chlordane | 50. | U |
| 8001-35-2 | Toxaphene | 100 | U |
| 12674-11-2 | Aroclor-1016 | 50. | U |
| 11104-28-2 | Aroclor-1221 | 50. | U |
| 11141-16-5 | Aroclor-1232 | 50. | U |
| 53469-21-9 | Aroclor-1242 | 50. | U |
| 12672-29-6 | Aroclor-1248 | 50. | U |
| 11097-69-1 | Aroclor-1254 | 100 | U |
| 11096-82-5 | Aroclor-1260 | 100 | U |

Blank contamination - per lab narrative
BJ 3/6/89

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW31

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235894

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/16/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/21/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.10

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 7.5 | ~~x~~ u |
| 319-85-7 | beta-BHC | 5.0 | U |
| 319-86-8 | delta-BHC | 5.0 | U |
| 58-89-9 | gamma-BHC (Lindane) | 21. | ~~x~~ u |
| 76-44-8 | Heptachlor | 5.0 | U |
| 309-00-2 | Aldrin | 5.0 | U |
| 1024-57-3 | Heptachlor epoxide | 5.0 | U |
| 959-98-8 | Endosulfan I | 5.0 | U |
| 60-57-1 | Dieldrin | 10. | U |
| 72-55-9 | 4,4'-DDE | 10. | U |
| 72-20-8 | Endrin | 10. | U |
| 33213-65-9 | Endosulfan II | 10. | U |
| 72-54-8 | 4,4'-DDD | 10. | U |
| 1031-07-8 | Endosulfan sulfate | 10. | U |
| 50-29-3 | 4,4'-DDT | 10. | U |
| 72-43-5 | Methoxychlor | 50. | U |
| 53494-70-5 | Endrin ketone | 10. | U |
| 5103-71-9 | alpha-Chlordane | 50. | U |
| 5103-74-2 | gamma-Chlordane | 50. | U |
| 8001-35-2 | Toxaphene | 100 | U |
| 12674-11-2 | Aroclor-1016 | 50. | U |
| 11104-28-2 | Aroclor-1221 | 50. | U |
| 11141-16-5 | Aroclor-1232 | 50. | U |
| 53469-21-9 | Aroclor-1242 | 50. | U |
| 12672-29-6 | Aroclor-1248 | 50. | U |
| 11097-69-1 | Aroclor-1254 | 100 | U |
| 11096-82-5 | Aroclor-1260 | 100 | U |

Block contamination - see lab narrative 3/6/89

# GENERAL DATA QUALIFIERS



For reporting results to the USEPA, the following contract specific qualifiers are to be used. The seven qualifiers defined below are not subject to modification by the laboratory. Up to five qualifiers may be reported on Form I for each compound.

The seven EPA-defined qualifiers to be used are as follows:

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ moisture}{100}$$

and df = dilution factor

at 24% moisture, $D = \frac{100-24}{100} = 0.76$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration of 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract shall be confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number. NOTE: For total xylenes, when three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g., a diluted analysis is not required for total xylenes unless the concentration of either peak separately exceeds 200 ug/L.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. Begin by using "X". If more than one flag is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some samples.

The combination of flags "BU" or "UB" is expressly prohibited. Blank contaminants are flagged "B" only when they are also detected in the sample.

If analyses at two different dilution factors are required (see Exhibit D), follow the data reporting instructions given in Exhibit D and with the "D" and "E" flags above.

DEC 20 1988

SAMPLE DATES: 12/13-17/88
LOG IN DATE: 1/10/89
DUE DATE: 2/21/89

# CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
## ORGANICS/INORGANICS

SUPERFUND 5815

THIS FORM IS TO BE USED FOR SAMPLES SENT TO CONTRACT ONLY

CASE NUMBER/SAS No. 11111/4231E SITE NAME Titanium Metals LABORATORY Compu/Silver DATE SHIPPED 12/14,16/88

SUPERFUND DU NUMBER 1905 EPA RPM or OSC (S.M.S.)/(CES) _____ CERCLIS NUMBER OHD098435134 PAGE 2 OF 12

ACTIVITY NUMBER ~~E-72.100~~ TFA102

| CRL LOG NUMBER | ORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No. | INORGANIC TRAFFIC REPORT NUMBER 1/10/89 | WATER OR LIQUIDS: ACID-BASE NEUTRAL CPDS ORGANIC SCAN UG/L TOX17574 | VOLATILE ORGANIC ANALYSIS ORGANIC SCAN UG/L TOX17564 | WATER POLYCHLORINATED BIPHENYLS UG/L PES17144 | WATER CHLORINATED PESTICIDES UG/L PES17134 | TOTAL METALS IN WATER UG/L MET111 | WATER CYANIDE UG/L MIN74919 | NITRATE/NITRITE MG/L MIN7284 | AMMONIA MG/L MIN7294 | RESIDUE, FILTERABLE TDS MG/L MIN7362 | RESIDUE, NON-FILT TSS MG/L MIN7372 | | | SEDIMENTS or SOILS: ACID-BASE NEUTRAL CPDS ORGANIC SCAN MG/KG TOX215722 | VOLATILE ORGANIC ANALYSIS ORGANIC SCAN MG/KG TOX215622 | SEDIMENTS POLYCHLORINATED BIPHENYLS MG/KG PES211422 | SEDIMENT CHLORINATED PESTICIDES MG/KG 211322 | TOTAL METALS MG/KG MET413 | CYANIDE MG/KG MIN44930 | EP TOXICITY METALS MG/KG | AMMONIA MG/KG MIN42925 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 89FS08524 | ECW25 | MEBW36 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | |
| 89FS08525 | ECW26 | MEBW37 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | |
| 89FS08526 | ECW27 | MEBW38 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | |
| 89FS08527 | ECW28 | MEBW39 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | |
| 89FS08528 | ECW29 | MEBW40 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | |
| 89FS08D26 | ECW30 | MEBW41 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | |
| 89FS08R02 | ECW31 | MEBW42 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | |

USEPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 ALEXANDRIA, VA 22313
703/557-2490 FTS-557-2490

CASE NO: 11111

SAS NO: (IF APPLICABLE) 4231E

# ORGANIC TRAFFIC REPORT

(FOR CLP USE ONLY)

TYPE OF ACTIVITY (CIRCLE ONE) ①
SUPERFUND—PA SI ESI RIFS RD RA ER
NPLD O&M OTHER _____
NON-SUPERFUND—_____ PROGRAM

SAMPLE DESCRIPTION
(ENTER IN BOX A)
1. SURFACE WATER
2. GROUND WATER
3. LEACHATE
4. SOIL
5. SEDIMENT
6. OIL (SAS)
7. WASTE (SAS)

REGION NO: V
SAMPLING COMPANY ②: F.I.T.
SAMPLER: (NAME) Ron Sivit

SHIP TO: ③ CompuChem Labs
3308 Chapel Hill/Nelson Hwy
P.O. Box 12652
RTP NC 27709
ATTN: Larry Jokes

SAMPLING DATE: ④
BEGIN: 12-14-88 END: 12-14-88
DATE SHIPPED: 12-14-88 CARRIER: F ⑤
AIRBILL NO: 3943815610

DATE REC'D: 12-15-88
SDG NO: ⑥ ECW25
REC'D BY: Joan Purdie
LABORATORY CONTRACT NO. SAS#4231E
UNIT PRICE 750.00

TRANSFER TO:
DATE REC'D: ⑦
REC'D BY:
CONTRACT NO./PRICE:

Shipment is Complete

| CLP SAMPLE NUMBER (FROM LABELS) | SAMPLE DESCRIPTION (FROM BOX 1) 1 2 3 4 5 6 7 | CONCENTRATION L = LOW/MED. H = HIGH (SAS) | RAS ANALYSIS: VOLATILE | BASE/NEUT /ACID | PESTICIDE /PCB's | | SPECIAL HANDLING | STATION LOCATION | SAMPLE CONDITION ON RECEIPT | HIGH CONC. PHASES (CHECK): SOLID | WATER—MIS LIQUID | NON WATER—MIS LIQUID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Received in good Condition 12-15-88 CCHS | | | |
| ECW 25 | 2 | L | ✓ | ✓ | ✓ | | MSD | RW 1-MSD | 235879 | | | |
| ECW 26 | 2 | L | ✓ | ✓ | ✓ | | | RW 2 | 235889 | | | |
| ECW 27 | 2 | L | ✓ | ✓ | ✓ | | | RW 3 | 235890 | | | |
| ECW 28 | 2 | L | ✓ | ✓ | ✓ | | | RW 4 | 235891 | | | |
| ECW 29 | 2 | L | ✓ | ✓ | ✓ | | | RW 5 | 235892 | | | |
| ECW 30 | 2 | L | ✓ | ✓ | ✓ | | | Duplicate | 235893 | | | |
| ECW 31 | 3 | L | ✓ | ✓ | ✓ | | Blank | Blank | 235894 | | | |
| ~~Last Sample~~ | | | | | | | | | | | | |
| INSDE-ECW25 | ECW 1/16 | | | | | | | | | | | |

EPA Form 2075-7 (8-87)

WHITE — SMO COPY PINK — CLIENT COPY WHITE — LAB COPY FOR RETURN TO SMO YELLOW — LAB COPY

SAMPLE DATA PACKAGE

COMPUCHEM LABORATORIES

RECEIVED
JAN 17 1989
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK STREET
CHICAGO, ILLINOIS 60605

13/JAN/89

Viar and Company
209 Madison Street
Suite 200
Alexandria, VA 22314

Attention: Mr. Richard Thacker
Deputy Project Manager

Re: EPA contract #

Subject: REPORT OF DATA - Case# 4231E SDG# ECW25 SAS# #4231

Dear Mr. Thacker:

Enclosed herewith are the results of analytical data performed in accordance with the referenced contract.

This report covers 7 sample(s) and results associated with analysis of the duplicate matrix spike results, received by CompuChem Laboratories identified as Case Number 4231E .

If you have any questions regarding this data package, please contact me at 1-919-549-8263.

Sincerely,

Mary Mitchell
Supervisor, Report Deliverables

Attachment

cc: EPA Region V
EMSL

Case Narrative-SAS# 4231E
SDG No. ECW25
Contract: SAS4231E
CompuChem Laboratories, Inc.

SAMPLES: ECW25, ECW26, ECW27, ECW28, ECW29, ECW30, ECW31

Attached are pertinent Quality Assurance notices dealing with the analysis of seven (07) MDL water samples associated with SAS# 4231E, SDG No. ECW25. This samples were scheduled for volatile, semi-volatile and pesticide analysis.

The samples were received in good condition on December 15, 1988 with the chain-of-custody in order. No irregularities were encountered during receipt of the sample.

MDL COMMENTS:
1) CompuChem is following EPA rounding convention for CRQL and result reporting. Semivolatile and Volatile fractions are being reported to one significant figure below ten. Pesticides are being reported to two significant figures.
2) The J values are being reported down to half of modified CRQL.
3) The word "No" on quantitation report either means the compounds were not found or the compound results were less than 1/2 the CRQL.
4) The units for reporting pesticides is NG/L.

VOLATILES:
All volatile fractions were prepared and analyzed within holding time requirements. The samples contained 0-7 Target Compounds. Some samples contained the target compounds acetone in varying concentrations. Since acetone was present in low levels in the associated blank, all samples will be flagged with a 'B' qualifier accordingly for this compound. One Tentively Identified Compound (TIC) was found for sample ECW31 / CCN 235894. Sample ECW30 / CCN 235893 for the volatile fraction was analyzed twice as a Lower Detection Limit Liquid. In both analyses, at least one of the surrogates failed recovery acceptance criteria. Since the associated instrument blank and other samples analyzed during the 12-hour tune period were acceptable, we have concluded that this is a sample matrix effect. Both analyses are being reported with reference to a qualifier All MS, MSD and internal standard recoveries were within all control limits.

SEMI-VOLATILES:
The semi-volatile portion of this case met all holding time considerations. Samples ECW27 / CCN235890, ECW29 / CCN 235892, ECW30 / CCN 235893 and ECW31 / CCN 235894 all contained the target compound phenol. Samples ECW28 and ECW28RE / 235891, along with ECW31 / CCN235894 all contained one Tentatively Identified Compound (TIC). The surrogate recover-

ies for sample ECW28 fell outside the quality control limits in both the original and repeated extractions. Results were comparable between the two analyses. Since all other QC criteria associated with these analyses were met, we have attributed the out-of-control surrogate recoveries to the particular sample matrix, rather than deficiencies in the laboratory's analytical system. Samples ECW25 / CCN 235879, ECW26 / CCN 235889, along with ECW29MS / CCN 235880 and ECW29MSD / CCN 235881 all contained one surrogate outlier consisting of 2-Fluorophenol as an outlier. One outlier is acceptable with contract protocol. The original, MS and MSD comparison indicated that four of the eleven MS % recoveries and three of the MSD % reoveries were outside of the QC limits.

advisory ranges only. The MSD, surrogate and internal recoveries were within all control limits.

PESTICIDES:
The pesticide fractions initial extraction met all holding time requirements. However, samples ECW30 / CCN 235893, ECW25MS / CCN 235883 and ECW25MSD / CCN 235884 were reextracted outside the holding time requirements due to contamination and low spike recoveries for the MS and MSD. A lower detection limit, by a factor of 10 exists, due to lower detection limit requirements. The original, MS and MSD comparison indicated that five of the six Matrix Spike % Recoveries were outside the control limits and that four of the Matrix Spike Duplicate % Recoveries were out. No recovery data was available for 4,4'-DDT due to matrix interferences. All MS and MSD % recoveries are advisory only. Blank PBLK15 / CCN 236702 was contaminated with 12 ng/l of alpha BHC and 12 ng/l of gamma BHC. All associated samples were also contaminated with these compounds and were therefore flagged with an 'X' qualifier. The contaminated samples along with the MS and MSD could not be reextracted due to insufficient sample volume was available. The EPA region was contacted and they requested that the data be submitted.

Release of the data contained in this hardcopy data package and in the computer readable data submitted on floppy diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

Betty J. Andershock

Betty J. Andershock
Technical Reviewer
January 13, 1989

Note: This report is paginated for reference and accountability in decreasing numerical sequence.

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

| | EPA SAMPLE NO. | S1 (TOL) # | S2 (BFB) # | S3 (DCE) # | OTHER | TOT OUT |
|---|---|---|---|---|---|---|
| 01 | ECW25 | 108 | 96 | 97 | | 0 |
| 02 | ECW26 | 104 | 87 | 88 | | 0 |
| 03 | ECW27 | 105 | 97 | 93 | | 0 |
| 04 | ECW28 | 108 | 93 | 90 | | 0 |
| 05 | ECW29 | 108 | 98 | 92 | | 0 |
| 06 | ECW30 | 93 | 89 | 71 * | | 1 |
| 07 | ECW30RE | 79 * | 77 * | 75 * | | 3 |
| 08 | ECW31 | 108 | 97 | 92 | | 0 |
| 09 | ECW25MS | 99 | 88 | 86 | | 0 |
| 10 | ECW25MSD | 101 | 90 | 88 | | 0 |
| 11 | VBLKAD | 96 | 93 | 90 | | 0 |
| 12 | VBLKHL | 107 | 105 | 98 | | 0 |
| 13 | VBLKST | 90 | 88 | 94 | | 0 |
| 14 | VBLKXD | 96 | 94 | 92 | | 0 |

| | | QC LIMITS |
|---|---|---|
| S1 (TOL) | = Toluene-d8 | ( 88-110) |
| S2 (BFB) | = Bromofluorobenzene | ( 86-115) |
| S3 (DCE) | = 1,2-Dichloroethane-d4 | ( 76-114) |

# Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

| | EPA SAMPLE NO. | S1 (NBZ) # | S2 (FBP) # | S3 (TPH) # | S4 (PHL) # | S5 (2FP) # | S6 (TBP) # | OTHER | TOT OUT |
|---|---|---|---|---|---|---|---|---|---|
| 01 | ECW25 | 59 | 55 | 73 | 10 | 15 * | 35 | | 1 |
| 02 | ECW26 | 38 | 45 | 50 | 12 | 16 * | 38 | | 1 |
| 03 | ECW27 | 51 | 46 | 62 | 27 | 37 | 44 | | 0 |
| 04 | ECW28 | 56 | 55 | 65 | 0 * | 0 * | 0 * | | 3 |
| 05 | ECW28RE | 21 * | 75 | 59 | 0 * | 0 * | 0 * | | 4 |
| 06 | ECW29 | 64 | 78 | 115 | 33 | 48 | 59 | | 0 |
| 07 | ECW30 | 73 | 79 | 110 | 38 | 53 | 67 | | 0 |
| 08 | ECW31 | 68 | 77 | 107 | 40 | 59 | 72 | | 0 |
| 09 | ECW29MS | 46 | 71 | 104 | 10 | 13 * | 70 | | 1 |
| 10 | ECW29MSD | 43 | 57 | 77 | 11 | 18 * | 69 | | 1 |
| 11 | SBLK17 | 51 | 64 | 64 | 31 | 44 | 44 | | 0 |
| 12 | SBLK-72 | 47 | 70 | 66 | 60 | 76 | 76 | | 0 |

| | | QC LIMITS |
|---|---|---|
| S1 (NBZ) | = Nitrobenzene-d5 | ( 35-114) |
| S2 (FBP) | = 2-Fluorobiphenyl | ( 43-116) |
| S3 (TPH) | = Terphenyl | ( 33-141) |
| S4 (PHL) | = Phenol-d5 | ( 10-94 ) |
| S5 (2FP) | = 2-Fluorophenol | ( 21-100) |
| S6 (TBP) | = 2,4,6-Tribromophenol | ( 10-123) |

# Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

| | EPA SAMPLE NO. | S1 (DBC) # | OTHER |
|---|---|---|---|
| 01 | PBLK15 | 81 | 0 |
| 02 | ECW25 | 124 | 0 |
| 03 | ECW26 | 96 | 0 |
| 04 | ECW27 | 120 | 0 |
| 05 | ECW28 | 88 | 0 |
| 06 | ECW29 | 121 | 0 |
| 07 | ECW31 | 104 | 0 |
| 08 | PBLK43 | 92 | 0 |
| 09 | ECW27MS | 57 | 0 |
| 10 | ECW27MSD | 55 | 0 |
| 11 | PBLK45 | 103 | 0 |
| 12 | ECW30 | 101 | 0 |
| 13 | | | |
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| 29 | | | |
| 30 | | | |

S1 (DBC) = Dibutylchlorendate ADVISORY QC LIMITS (24-154)

# Column used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out



FORM II PEST-1 1/87 Rev.

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix Spike - EPA Sample No.: ECW25

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC # | QC LIMITS REC. |
|---|---|---|---|---|---|
| 1,1-Dichloroethene | 12.5 | 0 | 16.5 | 132 | 61-145 |
| Trichloroethene | 12.5 | 0 | 12.8 | 102 | 71-120 |
| Benzene | 12.5 | 0 | 12.1 | 97 | 76-127 |
| Toluene | 12.5 | 0 | 12.7 | 102 | 76-125 |
| Chlorobenzene | 12.5 | 0 | 12.4 | 99 | 75-130 |

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 12.5 | 15.2 | 122 | 8 | 14 | 61-145 |
| Trichloroethene | 12.5 | 13.1 | 105 | -3 | 14 | 71-120 |
| Benzene | 12.5 | 12.4 | 99 | -2 | 11 | 76-127 |
| Toluene | 12.5 | 13.0 | 104 | -2 | 13 | 76-125 |
| Chlorobenzene | 12.5 | 12.8 | 102 | -3 | 13 | 75-130 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP ,4231,EECW25,-ECW2,LOW,WATER,235879,PEST, ,
TUNE: 0011 121788 0713

FORM III VOA-1 1/87 Rev.

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix Spike - EPA Sample No.: ECW29

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC # | QC LIMITS REC. |
|---|---|---|---|---|---|
| Phenol | 40.0 | 0 | 3.66 | 9 * | 12- 86 |
| 2-Chlorophenol | 40.0 | 0 | 10.5 | 26 * | 27-123 |
| 1,4-Dichlorobenzene | 20.0 | 0 | 12.6 | 63 | 36 97 |
| N-Nitroso-di-n-prop.(1) | 20.0 | 0 | 7.90 | 40 * | 41 116 |
| 1,2,4-Trichlorobenzene | 20.0 | 0 | 18.6 | 93 | 39 98 |
| 4-Chloro-3-methylphenol | 40.0 | 0 | 4.50 | 11 * | 23 97 |
| Acenaphthene | 20.0 | 0 | 12.9 | 65 | 46-118 |
| 4-Nitrophenol | 40.0 | 0 | 14.2 | 36 | 10- 80 |
| 2,4-Dinitrotoluene | 20.0 | 0 | 11.6 | 58 | 24- 96 |
| Pentachlorophenol | 40.0 | 0 | 30.4 | 76 | 9-103 |
| Pyrene | 20.0 | 0 | 16.1 | 81 | 26-127 |

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Phenol | 40.0 | 3.88 | 10 * | -11 | 42 | 12- 86 |
| 2-Chlorophenol | 40.0 | 11.6 | 29 | -11 | 40 | 27-123 |
| 1,4-Dichlorobenzene | 20.0 | 8.58 | 43 | 38 * | 28 | 36 97 |
| N-Nitroso-di-n-prop.(1) | 20.0 | 5.32 | 27 * | 39 * | 38 | 41 116 |
| 1,2,4-Trichlorobenzene | 20.0 | 10.1 | 51 | 58 * | 28 | 39 98 |
| 4-Chloro-3-methylphenol | 40.0 | 3.04 | 8 * | 32 | 42 | 23 97 |
| Acenaphthene | 20.0 | 10.3 | 52 | 22 | 31 | 46-118 |
| 4-Nitrophenol | 40.0 | 13.6 | 34 | 6 | 50 | 10- 80 |
| 2,4-Dinitrotoluene | 20.0 | 7.96 | 40 | 37 | 38 | 24- 96 |
| Pentachlorophenol | 40.0 | 29.4 | 74 | 3 | 50 | 9-103 |
| Pyrene | 20.0 | 10.4 | 52 | 44 * | 31 | 26-127 |

(1) N-Nitroso-di-n-propylamine

# Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 4 out of 11 outside limits
Spike Recovery: 7 out of 22 outside limits

COMMENTS: CLP ,4231,EECW25,-ECW2,LOW,WATER,235892,PEST, ,
TUNE: 0015 121988 0034

3E
WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix Spike - EPA Sample No.: ECW27

| COMPOUND | SPIKE ADDED (ng/L) | SAMPLE CONCENTRATION (ng/L) | MS CONCENTRATION (ng/L) | MS % REC # | QC LIMITS REC. |
|---|---|---|---|---|---|
| gamma-BHC (Lindane) | 100.000 | 0.000 | 50.000 | 50 * | 56-123 |
| Heptachlor | 100.000 | 0.000 | 40.000 | 40 | 40-131 |
| Aldrin | 100.000 | 0.000 | 30.000 | 30 * | 40-120 |
| Dieldrin | 250.000 | 0.000 | 100.000 | 40 * | 52-126 |
| Endrin | 250.000 | 0.000 | 130.000 | 52 * | 56-121 |
| 4,4'-DDT | 250.000 | 0.000 | 0.000 | 0 * | 38-127 |

| COMPOUND | SPIKE ADDED (ng/L) | MSD CONCENTRATION (ng/L) | MSD % REC # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| gamma-BHC (Lindane) | 100.000 | 50.000 | 50 * | 0 | 15 | 56-123 |
| Heptachlor | 100.000 | 40.000 | 40 | 0 | 20 | 40-131 |
| Aldrin | 100.000 | 30.000 | 30 * | 0 | 22 | 40-120 |
| Dieldrin | 250.000 | 100.000 | 40 * | 0 | 18 | 52-126 |
| Endrin | 250.000 | 140.000 | 56 | 7 | 21 | 56-121 |
| 4,4'-DDT | 250.000 | 0.000 | 0 * | 0 * | 27 | 38-127 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 7 out of 10 outside limits

COMMENTS: NO RECOVERY DATA FOR DDT AVAILABLE DUE TO MATRIX INTERFERENCE.

FORM III PEST-1 8/87 Rev.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Lab File ID: CC881217A11 Lab Sample ID: VBLKAD

Date Analyzed: 12/17/88 Time Analyzed: 0931

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | TIME ANALYZED |
|---|---|---|---|---|
| 01 | ECW25 | 235879 | CN035879A11 | 1331 |
| 02 | ECW26 | 235889 | CN035889A11 | 1433 |

COMMENTS: CLP , , , , , , ,PEST,BLANK,
TUNE: 0011 121788 0713

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Lab File ID: CB881218B11 Lab Sample ID: VBLKHL

Date Analyzed: 12/18/88 Time Analyzed: 1737

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | TIME ANALYZED |
|---|---|---|---|---|
| 01 | ECW27 | 235890 | CR035890C11 | 0234 |
| 02 | ECW28 | 235891 | CN035891B11 | 2022 |
| 03 | ECW29 | 235892 | CR035892C11 | 0150 |
| 04 | ECW31 | 235894 | CR035894C11 | 0054 |

COMMENTS: CLP , , , , , , ,PEST,BLANK,
TUNE: 0011 121888 1547

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Lab File ID: CB881219A11 Lab Sample ID: VBLKST

Date Analyzed: 12/19/88 Time Analyzed: 1302

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | TIME ANALYZED |
|---|---|---|---|---|
| 01 | ECW30 | 235893 | CR035893A11 | 1555 |
| 02 | ECW30RE | 235893 | C2R35893B11 | 1737 |

COMMENTS: CLP
TUNE: 0011 121988 1114

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Lab File ID: CD881222C11 Lab Sample ID: VBLKXD

Date Analyzed: 12/22/88 Time Analyzed: 0452

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | TIME ANALYZED |
|---|---|---|---|---|
| 01 | ECW25MS | 235886 | CR035886C11 | 0549 |
| 02 | ECW25MSD | 235887 | C3R35887C11 | 0643 |

COMMENTS: CLP , , , , , , ,PEST,BLANK,
TUNE: 0011 122288 0141

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Lab File ID: GH036794C15 Lab Sample ID: SBLK17

Date Extracted: 12/17/88 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 12/19/88 Time Analyzed: 0244

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 15

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|---|
| 01 | ECW25 | 235879 | GH035879C15 | 12/19/88 |
| 02 | ECW26 | 235889 | GJ035889C15 | 12/19/88 |
| 03 | ECW27 | 235890 | GH035890C15 | 12/19/88 |
| 04 | ECW28 | 235891 | GH035891C15 | 12/19/88 |
| 05 | ECW29 | 235892 | GJ035892A15 | 12/19/88 |
| 06 | ECW30 | 235893 | GH035893A15 | 12/19/88 |
| 07 | ECW31 | 235894 | GH035894A15 | 12/19/88 |
| 08 | ECW29MS | 235880 | GJ035880B15 | 12/29/88 |
| 09 | ECW29MSD | 235881 | GJ035881B15 | 12/29/88 |

COMMENTS: CLP , ,00, ,LOW,WATER,236794,PEST,BLANK,
TUNE: 0015 121988 0034

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Lab File ID: GH037784A15 Lab Sample ID: SBLK-72

Date Extracted: 12/22/88 Extraction:(SepF/Cont/Sonc) ____

Date Analyzed: 12/27/88 Time Analyzed: 0941

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 15

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|---|
| 01 | ECW28RE | 235891 | GR035891B15 | 12/27/88 |

COMMENTS: CLP

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Lab Sample ID: 236702 Lab File ID: _____

Matrix:(soil/water) WATER Level:(low/med) LOW

Date Extracted: 12/15/88 Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed (1): 12/20/88 Date Analyzed (2): 12/23/88

Time Analyzed (1): 2104 Time Analyzed (2): 1350

Instrument ID (1): 03 Instrument ID (2): 07

GC Column ID (1): OV-101 GC Column ID (2): 2250/2401

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|---|---|---|---|---|
| 01 | ECW25 | 235879 | 12/20/88 | 12/23/88 |
| 02 | ECW26 | 235889 | 12/21/88 | 12/23/88 |
| 03 | ECW27 | 235890 | 12/21/88 | 12/23/88 |
| 04 | ECW28 | 235891 | 12/21/88 | 12/23/88 |
| 05 | ECW29 | 235892 | 12/21/88 | 12/23/88 |
| 06 | ECW31 | 235894 | 12/21/88 | 12/23/88 |
| 07 | | | | |
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| 26 | | | | |

COMMENTS: _____

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Lab Sample ID: 238381 Lab File ID: _____

Matrix:(soil/water) WATER Level:(low/med) LOW

Date Extracted: 12/28/88 Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed (1): 12/29/88 Date Analyzed (2): _____

Time Analyzed (1): 1753 Time Analyzed (2): _____

Instrument ID (1): 02 Instrument ID (2): _____

GC Column ID (1): OV-101 GC Column ID (2): _____

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|---|---|---|---|---|
| 01 | ECW27MS | 235883 | 12/29/88 | |
| 02 | ECW27MSD | 235884 | 12/29/88 | |
| 03 | | | | |
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COMMENTS: _____

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Lab Sample ID: 238432 Lab File ID: _____

Matrix:(soil/water) WATER Level:(low/med) LOW

Date Extracted: 12/29/88 Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed (1): 12/30/88 Date Analyzed (2): _____

Time Analyzed (1): 0048 Time Analyzed (2): _____

Instrument ID (1): 02 Instrument ID (2): _____

GC Column ID (1): OV-101 GC Column ID (2): _____

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|---|---|---|---|---|
| 01 | ECW30 | 235893 | 12/30/88 | |
| 02 | | | | |
| 03 | | | | |
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COMMENTS: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKAD

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: VBLKAD

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CC881217A11

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/17/88

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 2 | U |
| 67-64-1 | Acetone | 2 | |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 0.9 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | U |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 1 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 20 | U |
| 107-13-1 | Acrylonitrile | 26 | U |

FORM I VOA 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKHL

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: VBLKHL

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CB881218B11

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/18/88

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 2 | U |
| 67-64-1 | Acetone | 3 | |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 0.9 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | U |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 1 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 20 | U |
| 107-13-1 | Acrylonitrile | 26 | U |

FORM I VOA 1/87 Rev.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKAD

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: VBLKAD

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CC881217A11

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/17/88

Column (pack/cap) PACK Dilution Factor: BJA 1.12-89 ~~4.0~~ 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

FORM I VOA-TIC 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKHL

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: VBLKHL

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CB881218B11

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/18/88

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 BJA 1-12-89

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKST

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: VBLKST

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CB881219A11

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 2 | U |
| 67-64-1 | Acetone | 3 | |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 0.9 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | U |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 1 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 20 | U |
| 107-13-1 | Acrylonitrile | 26 | U |

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKST

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: VBLKST

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CB881219A11

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column (pack/cap) PACK Dilution Factor: BK 12-89 ~~4.0~~ 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKXD

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: VBLKXD

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CD881222C11

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/22/88

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 BM 2-12-89

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 2 | U |
| 67-64-1 | Acetone | 8 | |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 0.9 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | U |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 1 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 20 | U |
| 107-13-1 | Acrylonitrile | 26 | U |

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKXD

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: VBLKXD

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CD881222C11

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/22/88

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 BJA 12-89

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK17

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: SBLK17

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH036794C15

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 2 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 2 | U |
| 95-57-8 | 2-Chlorophenol | 2 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 2 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 2 | U |
| 100-51-6 | Benzyl Alcohol | 2 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 3 | U |
| 95-48-7 | 2-Methylphenol | 1 | U |
| 39638-32-9 | bis(2-Chloroisopropyl)Ether | 3 | U |
| 106-44-5 | 4-Methylphenol | 1 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 2 | U |
| 67-72-1 | Hexachloroethane | 2 | U |
| 98-95-3 | Nitrobenzene | 3 | U |
| 78-59-1 | Isophorone | 3 | U |
| 88-75-5 | 2-Nitrophenol | 2 | U |
| 105-67-9 | 2,4-Dimethylphenol | 2 | U |
| 65-85-0 | Benzoic Acid | 20 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 3 | U |
| 120-83-2 | 2,4-Dichlorophenol | 2 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 2 | U |
| 91-20-3 | Naphthalene | 2 | U |
| 106-47-8 | 4-Chloroaniline | 2 | U |
| 87-68-3 | Hexachlorobutadiene | 3 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 2 | U |
| 91-57-6 | 2-Methylnaphthalene | 2 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 2 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 2 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 2 | U |
| 91-58-7 | 2-Chloronaphthalene | 2 | U |
| 88-74-4 | 2-Nitroaniline | 1 | U |
| 131-11-3 | Dimethyl Phthalate | 2 | U |
| 208-96-8 | Acenaphthylene | 2 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 1 | U |

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1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK17

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: SBLK17

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH036794C15

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 3 | U |
| 83-32-9 | Acenaphthene | 2 | U |
| 51-28-5 | 2,4-Dinitrophenol | 15 | U |
| 100-02-7 | 4-Nitrophenol | 2 | U |
| 132-64-9 | Dibenzofuran | 1 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 1 | U |
| 84-66-2 | Diethylphthalate | 1 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1 | U |
| 86-73-7 | Fluorene | 1 | U |
| 100-01-6 | 4-Nitroaniline | 3 | U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 15 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 2 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 2 | U |
| 118-74-1 | Hexachlorobenzene | 2 | U |
| 87-86-5 | Pentachlorophenol | 2 | U |
| 85-01-8 | Phenanthrene | 1 | U |
| 120-12-7 | Anthracene | 3 | U |
| 84-74-2 | Di-n-Butylphthalate | 2 | U |
| 206-44-0 | Fluoranthene | 2 | U |
| 129-00-0 | Pyrene | 2 | U |
| 85-68-7 | Butylbenzylphthalate | 4 | U |
| 56-55-3 | Benzo(a)Anthracene | 2 | U |
| 218-01-9 | Chrysene | 2 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 2 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 2 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 2 | U |
| 50-32-8 | Benzo(a)Pyrene | 2 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 4 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 3 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 4 | U |

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK17

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: SBLK17

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH036794C15

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/17/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK-72

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: SBLK-72

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH037784A15

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/22/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/27/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 4 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 3 | U |
| 95-57-8 | 2-Chlorophenol | 4 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 4 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 4 | U |
| 100-51-6 | Benzyl Alcohol | 4 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5 | U |
| 95-48-7 | 2-Methylphenol | 2 | U |
| 39638-32-9 | bis(2-Chloroisopropyl)Ether | 5 | U |
| 106-44-5 | 4-Methylphenol | 2 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 3 | U |
| 67-72-1 | Hexachloroethane | 4 | U |
| 98-95-3 | Nitrobenzene | 5 | U |
| 78-59-1 | Isophorone | 5 | U |
| 88-75-5 | 2-Nitrophenol | 4 | U |
| 105-67-9 | 2,4-Dimethylphenol | 4 | U |
| 65-85-0 | Benzoic Acid | 40 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 5 | U |
| 120-83-2 | 2,4-Dichlorophenol | 4 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4 | U |
| 91-20-3 | Naphthalene | 4 | U |
| 106-47-8 | 4-Chloroaniline | 4 | U |
| 87-68-3 | Hexachlorobutadiene | 5 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 3 | U |
| 91-57-6 | 2-Methylnaphthalene | 4 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 4 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 3 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 3 | U |
| 91-58-7 | 2-Chloronaphthalene | 3 | U |
| 88-74-4 | 2-Nitroaniline | 2 | U |
| 131-11-3 | Dimethyl Phthalate | 3 | U |
| 208-96-8 | Acenaphthylene | 3 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 2 | U |

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK-72

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: SBLK-72

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH037784A15

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/22/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/27/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 5 | U |
| 83-32-9 | Acenaphthene | 3 | U |
| 51-28-5 | 2,4-Dinitrophenol | 30 | U |
| 100-02-7 | 4-Nitrophenol | 3 | U |
| 132-64-9 | Dibenzofuran | 2 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 2 | U |
| 84-66-2 | Diethylphthalate | 2 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 2 | U |
| 86-73-7 | Fluorene | 2 | U |
| 100-01-6 | 4-Nitroaniline | 6 | U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 30 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 3 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 3 | U |
| 118-74-1 | Hexachlorobenzene | 3 | U |
| 87-86-5 | Pentachlorophenol | 4 | U |
| 85-01-8 | Phenanthrene | 2 | U |
| 120-12-7 | Anthracene | 5 | U |
| 84-74-2 | Di-n-Butylphthalate | 4 | U |
| 206-44-0 | Fluoranthene | 3 | U |
| 129-00-0 | Pyrene | 3 | U |
| 85-68-7 | Butylbenzylphthalate | 7 | U |
| 56-55-3 | Benzo(a)Anthracene | 3 | U |
| 218-01-9 | Chrysene | 3 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 2 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 3 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 3 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 3 | U |
| 50-32-8 | Benzo(a)Pyrene | 4 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 7 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 5 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 8 | U |

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK-72

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: SBLK-72

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH037784A15

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/22/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/27/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

FORM I SV-TIC 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK15

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 236702

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. _____ dec. ____ Date Extracted: 12/15/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.10

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 10. | X |
| 319-85-7 | beta-BHC | 5.0 | U |
| 319-86-8 | delta-BHC | 5.0 | U |
| 58-89-9 | gamma-BHC (Lindane) | 9.6 | X |
| 76-44-8 | Heptachlor | 5.0 | U |
| 309-00-2 | Aldrin | 5.0 | U |
| 1024-57-3 | Heptachlor epoxide | 5.0 | U |
| 959-98-8 | Endosulfan I | 5.0 | U |
| 60-57-1 | Dieldrin | 10. | U |
| 72-55-9 | 4,4'-DDE | 10. | U |
| 72-20-8 | Endrin | 10. | U |
| 33213-65-9 | Endosulfan II | 10. | U |
| 72-54-8 | 4,4'-DDD | 10. | U |
| 1031-07-8 | Endosulfan sulfate | 10. | U |
| 50-29-3 | 4,4'-DDT | 10. | U |
| 72-43-5 | Methoxychlor | 50. | U |
| 53494-70-5 | Endrin ketone | 10. | U |
| 5103-71-9 | alpha-Chlordane | 50. | U |
| 5103-74-2 | gamma-Chlordane | 50. | U |
| 8001-35-2 | Toxaphene | 100 | U |
| 12674-11-2 | Aroclor-1016 | 50. | U |
| 11104-28-2 | Aroclor-1221 | 50. | U |
| 11141-16-5 | Aroclor-1232 | 50. | U |
| 53469-21-9 | Aroclor-1242 | 50. | U |
| 12672-29-6 | Aroclor-1248 | 50. | U |
| 11097-69-1 | Aroclor-1254 | 100 | U |
| 11096-82-5 | Aroclor-1260 | 100 | U |

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK43

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 238381

Sample wt/vol: 500 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/28/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/29/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.05

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 5.0 | U |
| 319-85-7 | beta-BHC | 5.0 | U |
| 319-86-8 | delta-BHC | 5.0 | U |
| 58-89-9 | gamma-BHC (Lindane) | 5.0 | U |
| 76-44-8 | Heptachlor | 5.0 | U |
| 309-00-2 | Aldrin | 5.0 | U |
| 1024-57-3 | Heptachlor epoxide | 5.0 | U |
| 959-98-8 | Endosulfan I | 5.0 | U |
| 60-57-1 | Dieldrin | 10. | U |
| 72-55-9 | 4,4'-DDE | 10. | U |
| 72-20-8 | Endrin | 10. | U |
| 33213-65-9 | Endosulfan II | 10. | U |
| 72-54-8 | 4,4'-DDD | 10. | U |
| 1031-07-8 | Endosulfan sulfate | 10. | U |
| 50-29-3 | 4,4'-DDT | 10. | U |
| 72-43-5 | Methoxychlor | 50. | U |
| 53494-70-5 | Endrin ketone | 10. | U |
| 5103-71-9 | alpha-Chlordane | 50. | U |
| 5103-74-2 | gamma-Chlordane | 50. | U |
| 8001-35-2 | Toxaphene | 100 | U |
| 12674-11-2 | Aroclor-1016 | 50. | U |
| 11104-28-2 | Aroclor-1221 | 50. | U |
| 11141-16-5 | Aroclor-1232 | 50. | U |
| 53469-21-9 | Aroclor-1242 | 50. | U |
| 12672-29-6 | Aroclor-1248 | 50. | U |
| 11097-69-1 | Aroclor-1254 | 100 | U |
| 11096-82-5 | Aroclor-1260 | 100 | U |

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK45

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 238432

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/30/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.10

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 5.0 | U |
| 319-85-7 | beta-BHC | 5.0 | U |
| 319-86-8 | delta-BHC | 5.0 | U |
| 58-89-9 | gamma-BHC (Lindane) | 5.0 | U |
| 76-44-8 | Heptachlor | 5.0 | U |
| 309-00-2 | Aldrin | 5.0 | U |
| 1024-57-3 | Heptachlor epoxide | 5.0 | U |
| 959-98-8 | Endosulfan I | 5.0 | U |
| 60-57-1 | Dieldrin | 10. | U |
| 72-55-9 | 4,4'-DDE | 10. | U |
| 72-20-8 | Endrin | 10. | U |
| 33213-65-9 | Endosulfan II | 10. | U |
| 72-54-8 | 4,4'-DDD | 10. | U |
| 1031-07-8 | Endosulfan sulfate | 10. | U |
| 50-29-3 | 4,4'-DDT | 10. | U |
| 72-43-5 | Methoxychlor | 50. | U |
| 53494-70-5 | Endrin ketone | 10. | U |
| 5103-71-9 | alpha-Chlordane | 50. | U |
| 5103-74-2 | gamma-Chlordane | 50. | U |
| 8001-35-2 | Toxaphene | 100 | U |
| 12674-11-2 | Aroclor-1016 | 50. | U |
| 11104-28-2 | Aroclor-1221 | 50. | U |
| 11141-16-5 | Aroclor-1232 | 50. | U |
| 53469-21-9 | Aroclor-1242 | 50. | U |
| 12672-29-6 | Aroclor-1248 | 50. | U |
| 11097-69-1 | Aroclor-1254 | 100 | U |
| 11096-82-5 | Aroclor-1260 | 100 | U |

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

PBLK15

Lab Name: COMPUCHEM LABORATORIES Contract: SAS4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

GC Column ID (1): OV-101 GC Column ID (2): MIXED

Instrument ID (1): 03 Instrument ID (2): 07

Lab Sample ID: 236702

Lab File ID: _____ (only if confirmed by GC/MS)

| PESTICIDE/PCB | RETENTION TIME | | RT WINDOW OF STANDARD FROM | TO | QUANT? (Y/N) | GC/MS? (Y/N) |
|---|---|---|---|---|---|---|
| 01 alpha-BHC | Column 1 | 1.82 | 1.77 | 1.85 | Y | N |
| 02 | Column 2 | 2.25 | 2.21 | 2.30 | N | N |
| 03 gamma-BHC | Column 1 | 2.12 | 2.06 | 2.15 | Y | N |
| 04 | Column 2 | 2.73 | 2.68 | 2.79 | N | N |

Comments: _____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW28RE

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235891

Sample wt/vol: 500 (g/mL) ML Lab File ID: GR035891B15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/22/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/27/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 4 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 3 | U |
| 95-57-8 | 2-Chlorophenol | 4 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 4 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 4 | U |
| 100-51-6 | Benzyl Alcohol | 4 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5 | U |
| 95-48-7 | 2-Methylphenol | 2 | U |
| 39638-32-9 | bis(2-Chloroisopropyl)Ether | 5 | U |
| 106-44-5 | 4-Methylphenol | 2 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 3 | U |
| 67-72-1 | Hexachloroethane | 4 | U |
| 98-95-3 | Nitrobenzene | 5 | U |
| 78-59-1 | Isophorone | 5 | U |
| 88-75-5 | 2-Nitrophenol | 4 | U |
| 105-67-9 | 2,4-Dimethylphenol | 4 | U |
| 65-85-0 | Benzoic Acid | 40 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 5 | U |
| 120-83-2 | 2,4-Dichlorophenol | 4 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4 | U |
| 91-20-3 | Naphthalene | 4 | U |
| 106-47-8 | 4-Chloroaniline | 4 | U |
| 87-68-3 | Hexachlorobutadiene | 5 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 3 | U |
| 91-57-6 | 2-Methylnaphthalene | 4 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 4 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 3 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 3 | U |
| 91-58-7 | 2-Chloronaphthalene | 3 | U |
| 88-74-4 | 2-Nitroaniline | 2 | U |
| 131-11-3 | Dimethyl Phthalate | 3 | U |
| 208-96-8 | Acenaphthylene | 3 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 2 | U |

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW28RE

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235891

Sample wt/vol: 500 (g/mL) ML Lab File ID: GR035891B15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/22/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/27/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 5 | U |
| 83-32-9 | Acenaphthene | 3 | U |
| 51-28-5 | 2,4-Dinitrophenol | 30 | U |
| 100-02-7 | 4-Nitrophenol | 3 | U |
| 132-64-9 | Dibenzofuran | 2 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 2 | U |
| 84-66-2 | Diethylphthalate | 2 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 2 | U |
| 86-73-7 | Fluorene | 2 | U |
| 100-01-6 | 4-Nitroaniline | 6 | U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 30 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 3 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 3 | U |
| 118-74-1 | Hexachlorobenzene | 3 | U |
| 87-86-5 | Pentachlorophenol | 4 | U |
| 85-01-8 | Phenanthrene | 2 | U |
| 120-12-7 | Anthracene | 5 | U |
| 84-74-2 | Di-n-Butylphthalate | 4 | U |
| 206-44-0 | Fluoranthene | 3 | U |
| 129-00-0 | Pyrene | 3 | U |
| 85-68-7 | Butylbenzylphthalate | 7 | U |
| 56-55-3 | Benzo(a)Anthracene | 3 | U |
| 218-01-9 | Chrysene | 3 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 2 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 3 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 3 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 3 | U |
| 50-32-8 | Benzo(a)Pyrene | 4 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 7 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 5 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 8 | U |

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW28RE

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235891

Sample wt/vol: 500 (g/mL) ML Lab File ID: GR035891B15

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/22/88

Extraction: (SepF/Cont/Sonc) ____ Date Analyzed: 12/27/88

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN | 5.72 | 36 | J |

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECW30RE

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235893

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: C2R35893B11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 DPA 1.12-89

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1 | U |
| 74-83-9 | Bromomethane | 0.8 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | U |
| 75-00-3 | Chloroethane | 1 | U |
| 75-09-2 | Methylene Chloride | 4 | |
| 67-64-1 | Acetone | 2 | U |
| 75-15-0 | Carbon Disulfide | 1 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 0.9 | U |
| 67-66-3 | Chloroform | 1 | |
| 107-06-2 | 1,2-Dichloroethane | 1 | U |
| 78-93-3 | 2-Butanone | 4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 2 | |
| 56-23-5 | Carbon Tetrachloride | 1 | U |
| 108-05-4 | Vinyl Acetate | 1 | U |
| 75-27-4 | Bromodichloromethane | 1 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | U |
| 79-01-6 | Trichloroethene | 1 | U |
| 124-48-1 | Dibromochloromethane | 1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U |
| 71-43-2 | Benzene | 1 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 1 | U |
| 75-25-2 | Bromoform | 2 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | U |
| 591-78-6 | 2-Hexanone | 1 | U |
| 127-18-4 | Tetrachloroethene | 1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | U |
| 108-88-3 | Toluene | 1 | U |
| 108-90-7 | Chlorobenzene | 0.9 | U |
| 100-41-4 | Ethylbenzene | 1 | U |
| 100-42-5 | Styrene | 1 | U |
| 1330-20-7 | Total Xylenes | 2 | U |
| 107-02-8 | Acrolein | 20 | U |
| 107-13-1 | Acrylonitrile | 26 | U |

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECW30RE

Lab Name: COMPUCHEM LABS Contract: 4231E

Lab Code: COMPU Case No.: 0000 SAS No.: 4231E SDG No.: ECW25

Matrix: (soil/water) WATER Lab Sample ID: 235893

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: C2R35893B11

Level: (low/med) LOW Date Received: 12/15/88

% Moisture: not dec. ____ Date Analyzed: 12/19/88

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|