SPFD

FAX FACT SHEET

TO: Gary Kepka
Superfund Branch

FAX #: 913-236-2845

FROM: L. Ellen Kurowski

Return Fax #: (314) 534-8149

RECEIVED
AUG 17 1988
CMPL SECTION

DATE: 8-17-88

# of Pages: 12
(includes this cover page)

Gary,

Pursuant to your request, enclosed are the analytical results for the groundwater samples. Should you have any additional questions, please feel free to call.

30285352
Superfund

Site: St. Louis Airport
ID #: MOD981687645
Page 2.3
Contractor Weston

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FAX FACT SHEET

TO: Gary Kepko
Superfund Branch

FAX #: 913-236-2845

FROM: L. Glen Kurowski

Return Fax #: (314) 534-8149

DATE: 8-17-88

# of Pages: 12

(includes this cover page)

Gary,

Pursuant to your request, enclosed are the analytical results for the groundwater samples. Should you have any additional questions, please feel free to call.

Glen

Custody Transfer Record/Lab Work Request

WESTON

WESTON Analytics Use Only

Client: Industrial Waste Management
Work Order:
Date Rec'd.: 7/30/88 Date Due: 3-5 work days
RFW Contact: Chris Heinz
Client Contact/Phone: Glen Kurowski/314 534 2266

Refrigerator#											
#/Type Container			BRGL	BRGL	BRGL						
Containers/Volume			1qt	1/2gal	1qt						
Preservative											
ANALYSES REQUESTED			BTU Flashpt Eptox	CORR BNA, Acrolein PCB	BTU Flashpt Eptox						
WA Use Only Lab ID	Client ID/Description	Matrix	Date Collected								
(1)	AIRP005A (Pit #1)	Liq	7/25/88	X							
(2)	AIRP005B (Pit #1)	Liq	7/25/88		X						
(3)	AIRP006 (Pit #2)	Liq	7/27/88			X					

Matrix:
S - Soil
SE - Sediment
SO - Solid
W - Water
O - Oil
A - Air
DS - Drum Solids
DL - Drum Liquids
F - Fish
X - Other

Special Instructions:

Item/Reason	Relinquished by	Received by	Date	Time	Item/Reason	Relinquished by	Received by	Date	Time
1-3	[illegible]	—	7/29/88	1720					

WESTON Analytics Use Only

Samples Were:
1 Shipped or Hand-Delivered
NOTES:

2 Ambient or Chilled
NOTES:

3 Received Broken/Leaking (Improperly Sealed)
Y N
NOTES:

4 Properly Preserved
Y N
NOTES:

5 Received Within Holding Times
Y N
NOTES:

COC Tape Was:
1 Present on Outer Package Y N
2 Unbroken on Outer Package Y N
3 Present on Sample Y N
4 Unbroken on Sample Y N
NOTES:

COC Record Was:
1 Present Upon Receipt of Samples Y N

Discrepancies Between Sample Labels and COC Record? Y N
NOTES:

RFW 21-21-001/A-5/88

7-115

UPS NEXT DAY AIR SHIPPER'S RECEIPT TRACKING NO. 1177 7661 603

WESTON ANALYTICS
INORGANICS DATA SUMMARY REPORT

CLIENT: I.W.M.
RFW # : 8808S001

DATE RECEIVED: 08/01/88
DATE REPORT: 08/10/88

LAB NO.:	001	002
FIELD NO.:	AIRP005B	AIRP006B
UNITS:	NA	NA
C/D FACTOR:	NA	NA
EPTOX: ARSENIC	0.5U	0.5U
BARIUM	10.U	10.U
CADMIUM	0.1U	0.1U
CHROMIUM	0.5U	0.5U
LEAD	0.5U	0.5U
MERCURY	0.020U	0.020U
SELENIUM	0.1U	0.1U
SILVER	0.5U	0.5U
BOMB CALORIMETRY:	<500 B.T.U./lb.	<1000 B.T.U./lb.
REACTIVE CYANIDE:	<0.02 MG/L	<0.02 MG/L
SULFIDES:	0.3 MG/L	0.1 MG/L
CORROSIVITY:	pH 7.2/NO	pH 6.9/NO
IGNITABILITY:	>200 F	>200 F

APPROVED BY: Roger A. Elliott DATE: 8-10-88
ROGER A. ELLIOTT
LABORATORY DIRECTOR
WESTON ANALYTICS

KESTON ANALYTICS
1720 LORAINE AVE., SUITE 105
STOCKTON CA 95210 209 957-2405

GC/MS SEMI-VOLATILE ORGANICS ANALYSIS

LAB REFERENCE NUMBER : QA88256
CLIENT SAMPLE ID : 0
REPORT DATE : 08-08-1988

BLANK

CLIENT NAME : FOR 88068001
FILE ID : 88M38N1387
BLANK ID : 88M38N1387
SAMPLE TYPE : WATER

DATE SAMPLED : 0
DATE RECEIVED : 0
DATE EXTRACTED : 08/02/88
DATE ANALYSED : 08/05/88

10 U	n-nitroso-dimethylamine	10 U	dibenzofuran
10 U	phenol	10 U	2,4-dinitrotoluene
10 U	aniline	10 U	2,6-dinitrotoluene
10 U	bis(2-chloroethyl) ether	10 U	diethyl phthalate
10 U	2-chlorophenol	10 U	4-chlorophenyl phenyl ether
10 U	1,3-dichlorobenzene	10 U	fluorene
10 U	1,4-dichlorobenzene	50 U	4-nitroaniline
10 U	benzyl alcohol	50 U	4,6-dinitro-2-methylphenol
10 U	1,2-dichlorobenzene	10 U	n-nitrosodiphenylamine
10 U	2-methylphenol	10 U	4-bromophenyl phenyl ether
10 U	bis(2-chloroisopropyl) ether	10 U	hexachlorobenzene
10 U	4-methylphenol	50 U	pentachlorophenol
10 U	n-nitroso-di-n-propylamine	10 U	phenanthrene
10 U	hexachloroethane	10 U	anthracene
10 U	nitrobenzene	10 U	di-n-butyl phthalate
10 U	isophorone	10 U	fluoranthene
10 U	2-nitrophenol	50 U	benzidine
10 U	2,4-dimethylphenol	10 U	pyrene
50 U	benzoic acid	10 U	butyl benzyl phthalate
10 U	bis(2-chloroethoxy) methane	20 U	3,3'-dichlorobenzidine
10 U	2,4-dichlorophenol	10 U	benzo(a)anthracene
10 U	1,2,4-trichlorobenzene	10 U	bis(2-ethylhexyl)phthalate
10 U	naphthalene	10 U	chrysene
10 U	4-chloroaniline	10 U	di-n-octyl phthalate
10 U	hexachlorobutadiene	10 U	benzo(b)fluoranthene
10 U	4-chloro-3-methylphenol	10 U	benzo(k)fluoranthene
10 U	2-methylnaphthalene	10 U	benzo(a)pyrene
10 U	hexachlorocyclopentadiene	10 U	indeno(1,2,3-cd)pyrene
10 U	2,4,6-trichlorophenol	10 U	dibenz(a,h)anthracene
50 U	2,4,5-trichlorophenol	10 U	benzo(g,h,i)perylene
10 U	2-chloronaphthalene	SURROGATE % RECOVERY	
50 U	2-nitroaniline	57	2-fluorophenol (SS1)
10 U	dimethyl phthalate	46	phenol-d5 (SS2)
10 U	acenaphthylene	100	nitrobenzene-d5 (SS3)
50 U	3-nitroaniline	88	2-fluorobiphenyl
10 U	acenaphthene	109	2,4,6-tribromophenol (SS5)
50 U	2,4-dinitrophenol	107	o-terphenyl-d14 (SS6)
50 U	4-nitrophenol		

RESULT UNITS : ug/l (micrograms per litre)

DILUTION FACTOR : 2

U = indicates the compound was analysed for, but not detected.
The numerical value preceeding 'U' is the limit of detection for that compound, based on dilution.
J = indicates an estimated trace value.

ANALYST : C.F. Carney

APPROVED BY :

Laboratory Name WESTON

Case No 8808001

Sample Number
A2RP015A

8808001-01
8813BN138

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	Unknown	BNA	587	170J
2.	"	"	597	200J
3.	"	"	624	170J
4.	"	"	675	260J
5.		"	1137	320J
6.				
7				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30				

RESTON ANALYTICS
7720 LORAINE AVE., SUITE 105
STOCKTON CA 95210 209 957-3405

GC/MS SEMI-VOLATILE ORGANICS ANALYSIS

LAB REFERENCE NUMBER : 8808S001-01
CLIENT SAMPLE ID : AIRP005A Pg #1
REPORT DATE : 09-08-1988

CLIENT NAME : IAM
FILE ID : 88M3EN1358
BLANK ID : 88M3EN1357
SAMPLE TYPE : WATER

DATE SAMPLED : 07/25/88
DATE RECEIVED : 08/01/88
DATE EXTRACTED : 08/02/88
DATE ANALYSED : 08/06/88

10 U	n-nitroso-dimethylamine	10 U	dibenzofuran
10 U	phenol	10 U	2,4-dinitrotoluene
10 U	aniline	10 U	2,6-dinitrotoluene
10 U	bis(2-chloroethyl) ether	10 U	diethyl phthalate
10 U	2-chlorophenol	10 U	4-chlorophenyl phenyl ether
10 U	1,3-dichlorobenzene	10 U	fluorene
10 U	1,4-dichlorobenzene	50 U	4-nitroaniline
10 U	benzyl alcohol	50 U	4,6-dinitro-2-methylphenol
10 U	1,2-dichlorobenzene	9 J	n-nitrosodiphenylamine
10 U	2-methylphenol	10 U	4-bromophenyl phenyl ether
10 U	bis(2-chloroisopropyl) ether	10 U	hexachlorobenzene
10 U	4-methylphenol	50 U	pentachlorophenol
10 U	n-nitroso-di-n-propylamine	10 U	phenanthrene
10 U	hexachloroethane	10 U	anthracene
10 U	nitrobenzene	10 U	di-n-butyl phthalate
10 U	isophorone	10 U	fluoranthene
10 U	2-nitrophenol	50 U	benzidine
10 U	2,4-dimethylphenol	10 U	pyrene
50 U	benzoic acid	10 U	butyl benzyl phthalate
10 U	bis(2-chloroethoxy) methane	20 U	3,3'-dichlorobenzidine
10 U	2,4-dichlorophenol	10 U	benzo(a)anthracene
10 U	1,2,4-trichlorobenzene	10 U	bis(2-ethylhexyl)phthalate
(100	naphthalene ug/l	10 U	chrysene
10 U	4-chloroaniline	10 U	di-n-octyl phthalate
10 U	hexachlorobutadiene	10 U	benzo(b)fluoranthene
10 U	4-chloro-3-methylphenol	10 U	benzo(k)fluoranthene
6 J	2-methylnaphthalene	10 U	benzo(a)pyrene
10 U	hexachlorocyclopentadiene	10 U	indeno(1,2,3-cd)pyrene
10 U	2,4,6-trichlorophenol	10 U	dibenz(a,h)anthracene
50 U	2,4,5-trichlorophenol	10 U	benzo(g,h,i)perylene
10 U	2-chloronaphthalene	SURROGATE % RECOVERY	
50 U	2-nitroaniline	54	2-fluorophenol (SS1)
10 U	dimethyl phthalate	54	phenol-d5 (SS2)
10 U	acenaphthylene	97	nitrobenzene-d5 (SS3)
50 U	3-nitroaniline	108	2-fluorobiphenyl
10 U	acenaphthene	110	2,4,6-tribromophenol (SS5)
50 U	2,4-dinitrophenol	121	p-terphenyl-d14 (SS6)
50 U	4-nitrophenol		

RESULT UNITS : (ug/l (micrograms per litre))

DILUTION FACTOR : 2

U = indicates the compound was analysed for, but not detected.
The numerical value preceeding 'U' is the limit of detection for that compound, based on dilution.
J = indicates an estimated trace value.

ANALYST : R. F. Carney

APPROVED BY : [signature]

ORGANICS ANALYSIS DATA SHEET - PAGE 5

WESTON ENVIRONMENTAL LABORATORY
7720 LORRAINE AVE., SUITE 105
STOCKTON CA 95210 209-957-3405

DATAFILE. 23N3BN1389
SAMPLE. 48089001-01 IWM AIRPO
MISC: 9N, INST: 4500, 900ML=>

3. TENTATIVELY IDENTIFIED COMPOUNDS

CAS #	SEMIVOLATILE COMPOUND NAMES	SCAN#	AMOUNT (UG/L / UG/
	BENZENE, ETHYL-	443	~~31~~ J
	BENZENE, 1,3-DIMETHYL-	489	17 J
	BENZENE, PROPYL-	576	21 J
	BENZENE, 1-ETHYL-3-METHYL-	587	85 J
	BENZENE, 1,3,5-TRIMETHYL-	597	96 J
	BENZENE, 1-ETHYL-2-METHYL-	614	39 J
	UNKNOWN	634	85 J
	BENZENE, 1,3,5-TRIMETHYL-	675	132 J
	1H-INDENE, 2,3-DIHYDRO-	695	27 J
	UNKNOWN	720	42 J
	UNKNOWN	766	72 J
	UNKNOWN	803	24 J
	UNKNOWN	830	30 J
	1,8-NONANEDIOL, 8-METHYL-	835	61 J
	UNKNOWN	841	29 J
	UNKNOWN	846	48 J
	UNKNOWN	917	30 J
	UNKNOWN	969	68 J
	UNKNOWN	1069	59 J
	BENZOIC ACID, 2,4-DIMETHYL-	1077	19 J
	BENZOIC ACID, 3,4-DIMETHYL-	1127	163 J
	UNKNOWN	1358	35 J
	UNKNOWN	1371	~~30~~ J
	UNKNOWN	1387	32 J

Client: Indust. Waste Mgmt.

Sample ID: Blank QA88254

Sampled: NA
Received: NA

Matrix: WATER

RFW Job #: 8808s001

ORGANOCHLORINE PESTICIDES/PCB'S

EPA 608

Extracted: 08/01/88
Analyzed: 08/11/88
Confirmed: NO

Ext Fact: 100
Dil Fact: 1
Blank ID: NA

RFW Lab #: NA

Compound	Results (ppb) ug/L	Det Limit Sample ug/L
Aroclor 1016.....	U	0.50
Aroclor 1221.....	U	0.50
Aroclor 1232.....	U	0.50
Aroclor 1242.....	U	0.50
Aroclor 1248.....	U	0.50
Aroclor 1254.....	U	1.00
Aroclor 1260.....	U	1.00

U = Compound analyzed for but not detected

Approved: Roger A. Elliott

Declan Cowley
Organic Section Manager

ORGANICS ANALYSIS DATA SHEET PAGE 5

ENVIRONMENTAL LABORATORY
2320 LORRAINE AVE., SUITE 105
STOCKTON CA 95210 209-957-3405

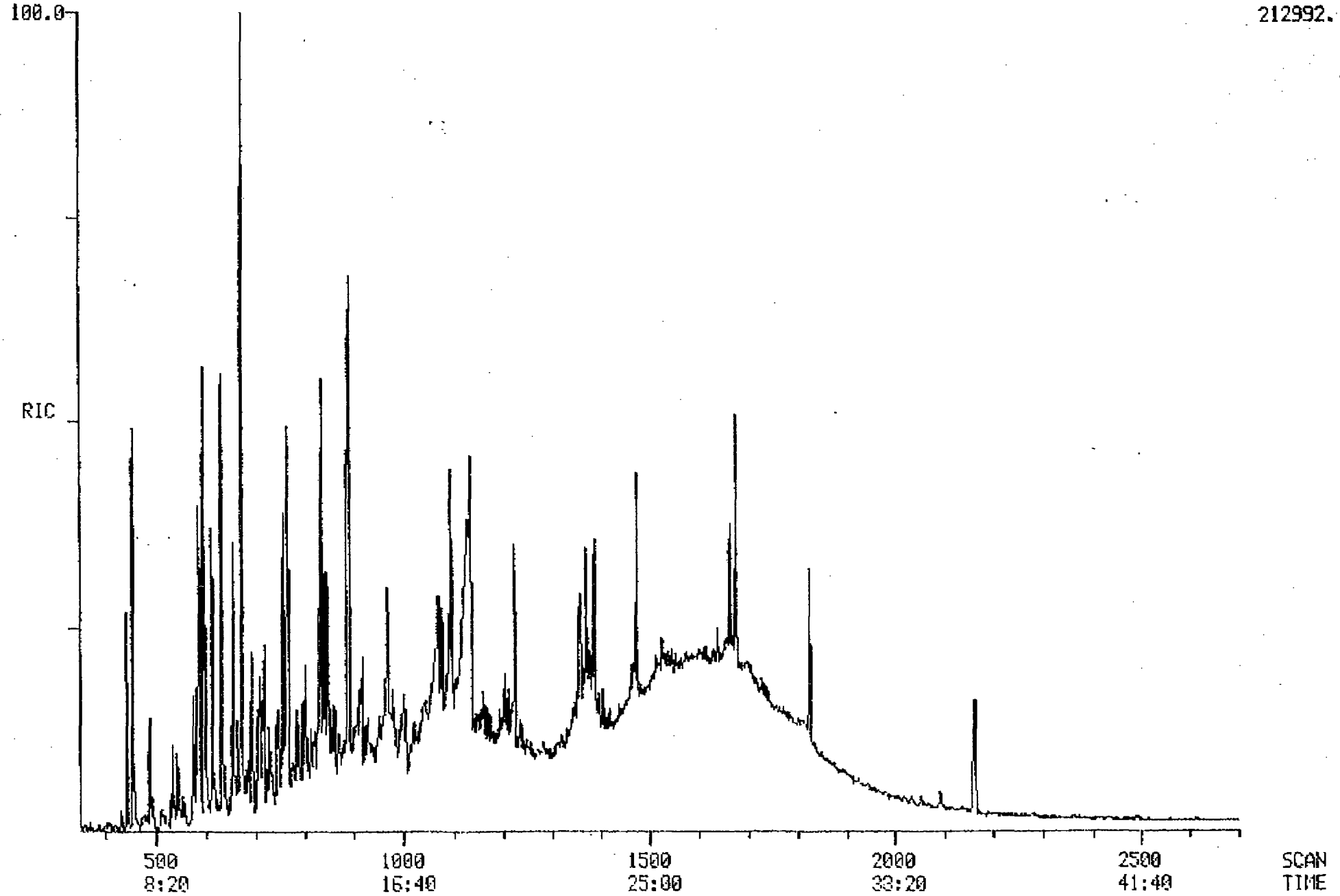
DATAFILE. 88M3BN1388
SAMPLE. 88089001-01 IWM AIRPO
MISC: 8N, INST: 4500, 900ML=

3. TENTATIVELY IDENTIFIED COMPOUNDS

CAS #	SEMIVOLATILE COMPOUND NAMES	SCAN#	AMOUNT UG/L / UG/K
	BENZENE, ETHYL-	443	~~21~~ J
	BENZENE, 1,3-DIMETHYL-	489	17 J
	BENZENE, PROPYL-	576	21 J
	BENZENE, 1-ETHYL-3-METHYL-	587	85 J
	BENZENE, 1,3,5-TRIMETHYL-	597	76 J
	BENZENE, 1-ETHYL-2-METHYL-	614	39 J
	UNKNOWN	634	85 J
	BENZENE, 1,3,5-TRIMETHYL-	675	132 J
	1H-INDENE, 2,3-DIHYDRO-	695	27 J
	UNKNOWN	720	42 J
	UNKNOWN	766	72 J
	UNKNOWN	803	24 J
	UNKNOWN	830	30 J
	1,8-NONANEDIOL, 8-METHYL-	835	61 J
	UNKNOWN	841	29 J
	UNKNOWN	846	48 J
	UNKNOWN	917	30 J
	UNKNOWN	969	68 J
	UNKNOWN	1069	59 J
	BENZOIC ACID, 2,4-DIMETHYL-	1077	19 J
	BENZOIC ACID, 3,4-DIMETHYL-	1187	163 J
	UNKNOWN	1356	35 J
	UNKNOWN	1371	~~38~~ J
	UNKNOWN	1387	32 J

RIC
08/06/88 0:36:00
SAMPLE: 8808S001-01 IWM AIRP005A
CONDS.: BN, INST: 4500, 900ML=>2X1ML
RANGE: G 1,2750 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 88M3BN1388 #1 SCANS 350 TO 2700
CALI: 88M3BN1387 #5



AUG 17 '88 09:08 STL TECHNOLOGY CTR.

Client: Indust. Waste Mgmt.

Sample ID: Blank QA88254

Sampled: NA Matrix: WATER

Received: NA RFW Job #: 8808s001

ORGANOCHLORINE PESTICIDES/PCB'S EPA 608

Extracted: 08/01/88 Ext Fact: 100

Analyzed: 08/11/88 Dil Fact: 1

Confirmed: NO Blank ID: NA

RFW Lab #: NA

Compound	Results (ppb) ug/L	Det Limit Sample ug/L
Aroclor 1016	U	0.50
Aroclor 1221	U	0.50
Aroclor 1232	U	0.50
Aroclor 1242	U	0.50
Aroclor 1248	U	0.50
Aroclor 1254	U	1.00
Aroclor 1260	U	1.00

U = Compound analyzed for but not detected

Approved: Roger A. Elliott

Declan Cowley
Organic Section Manager

Client: Indust. Waste Mgmt.

Sample ID: AIRP005A Pit #1

Sampled: 08/01/88 Matrix: WATER

Received: 08/01/88 RFW Job #: 8808s001

ORGANOCHLORINE PESTICIDES/PCB'S EPA 608

Extracted: 08/01/88 Ext Fact: 100

Analyzed: 08/10/88 Dil Fact: 1

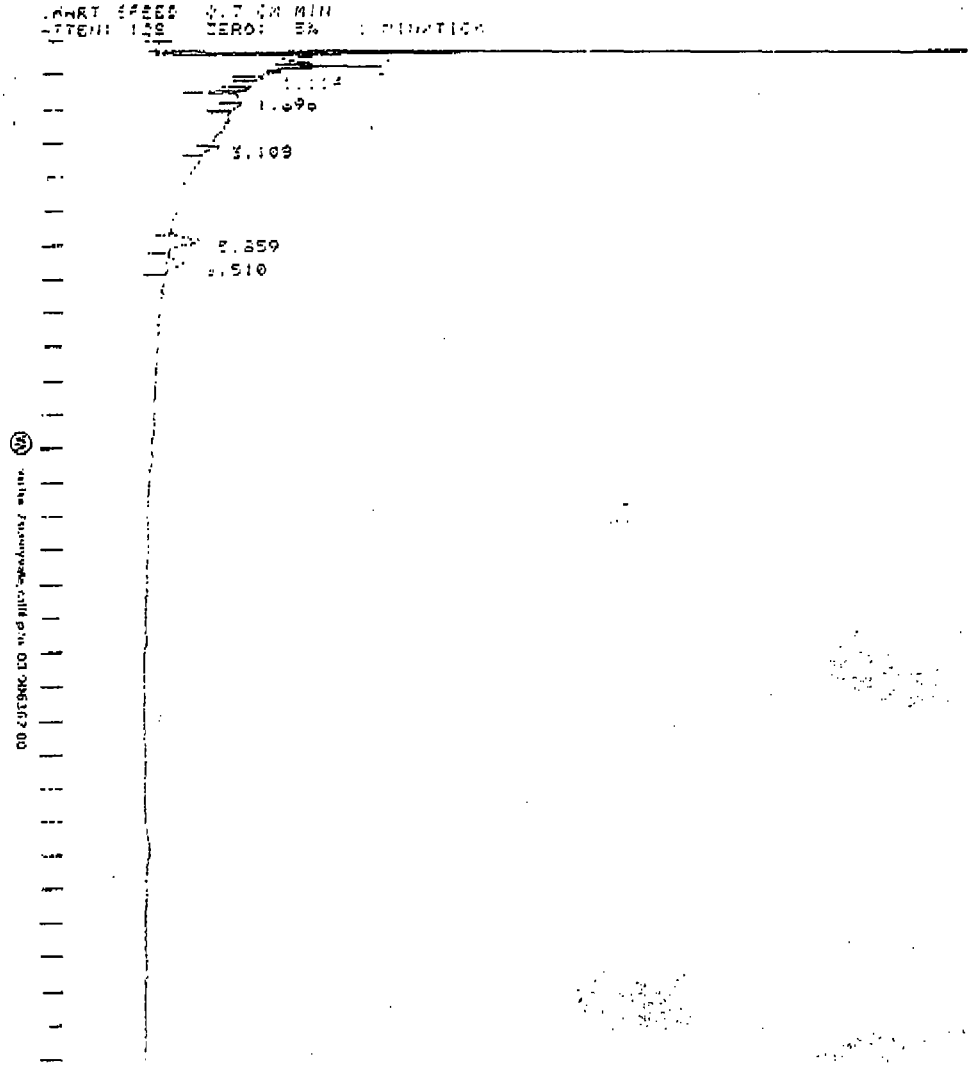
Confirmed: NO Blank ID: QA88254

RFW Lab #: 001

Compound	Results (ppb) ug/L	Det Limit Sample ug/L
Aroclor 1016.....	U	0.50
Aroclor 1221.....	U	0.50
Aroclor 1232.....	U	0.50
Aroclor 1242.....	U	0.50
Aroclor 1248.....	U	0.50
Aroclor 1254.....	U	1.00
Aroclor 1260.....	U	1.00

U = Compound analyzed for but not detected

Approved: Declan Cowley
Organic Section Manager



TITLE: ORGANOCHLORINE PESTICIDES 20:13 2 AUG 88

CHANNEL NO: 1 SAMPLE: ---------- METHOD: 608 ~~2803-401~~-02

PEAK NO	PEAK NAME	RESULT UG/L	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		0.0000	1.114		5927	BB	3.55
2		0.0000	1.368		20873	BV	5.05
3		0.0000	1.696		50[illegible]	VV	12.30
4	BHC-ALPHA	0.1533	1.967	0.087	[illegible]	VB	1.50
5	BHC-BETA	0.1175	3.109	0.098	[illegible]	BB	5.10
6	CHLRDANE-A	0.7917	5.859	-0.221	[illegible]	BV	12.70
7	ENDOSULF 1	0.3053	5.510	0.190	30674	VB	12.40
TOTALS:		1.4075		0.134	129225		

DETECTED PKS: 7 REJECTED PKS: 0

DIVISOR: 1.00000 MULTIPLIER: ~~1.00000~~ 100

NOISE: 332.9 OFFSET: 499

RACK: 4 VIAL: 8 INJ: 1

SAVED FILE: 608/927

NOTES:
5 FT. 1.5% SP-2250/1.75% SP-2401, 100/120
TEMP=INJ:250, DET:300, COL:200
GAS(ESCIA): OUT(-): RANGE(1), A-INJ(2), SA=250
* COELUTE 1 = DDD-4,4' + ENDOSULFAN 2
* COELUTE 2 = ENDRIN KETONE + DBC
HESTON ANALYTICS, STOCKTON, CA.