SDMS Document
112443

OCCIDENTAL CHEMICAL CORPORATION
RUCO POLYMER CORPORATION SITE
HICKSVILLE, NEW YORK

PROGRESS REPORT ON DELINEATION OF AROCLOR SOIL CONTAMINATION

Since June 1983, several phases of soil sampling have been completed to define the extent of PCB-contaminated soil in the vicinity of the Pilot Plant at the Ruco Polymer Corporation site. The occurrence of the PCB's was reportedly due to a spill which affected a 6-foot by 6-foot area. The contamination was apparently spread over a much wider area, possibly due to storm-water runoff and sediment transport.

The areas of soil contamination in the vicinity of the pilot plant, in the former storm-drain bed, and in the recharge basin which receives the storm runoff have been defined as a result of recent sampling and soil analyses. Shallow soil samples to delineate the extent of contamination were taken by hand methods on February 18, 1988 by Leggette, Brashears & Graham, Inc. personnel. Samples to determine the vertical extent of Aroclor 1248 in the recharge basin were taken during the period from March 16 to 18, 1988. The borings were drilled by East Coast Drilling & Boring, Inc. of Wallingford, Connecticut, under the supervision of an LBG hydrogeologist. All of the analytical work was performed by Occidental Chemical Corporation at their Grand Island laboratory.

The samples from the recharge basin were obtained with a split-barrel sampler driven ahead of temporary steel casing. The tripod drilling rig was mounted on a raft for access to two of the boring locations. After a sample was obtained, the steel casing was driven to the bottom depth of the sample interval and the sediments were washed out. Logs of the borings are presented in Appendix I.

HRC 001 0649

The extent of soil contamination is shown on figure 1, which also delineates the limit of the 10 mg/kg levels. The analytical data are presented in Appendix II. It is evident that, with the exception of the immediate spill area (Sample Locations W, X, Y, Z and S), the soil contamination is very shallow, although widespread. The data also indicate that PCB's were carried in the former open ditch which emptied into the recharge basin. At some point in time, a concrete storm sewer was laid in this ditch which was then backfilled and covered.

The analytical results of the recharge basin samples are presented on table 1 and in Appendix II. The data show that soil contamination extends to two feet below the basin bottom in Borings 1 and 2 and to about seven feet in Boring 3.

As a result of these latest sampling episodes the extent of soil contamination which may require remediation has been adequately defined. All of the data generated to date will be incorporated into a work plan for remediation. Because the plant is not currently owned or operated by Occidental Chemical Corporation, and because Ruco management has expressed concern regarding use of their property for soil treatment, excavation and land disposal at an approved hazardous waste-handling facility appears to be the most viable and economic means of accomplishing remediation. The work plan will present the details of preparation, staging, excavation, decontamination, post-excavation sampling, analytical procedures, backfilling and grading and the location of ultimate disposal.

LEGGETTE, BRASHEARS & GRAHAM, INC.

Robert Lamonica, CPG
Vice President

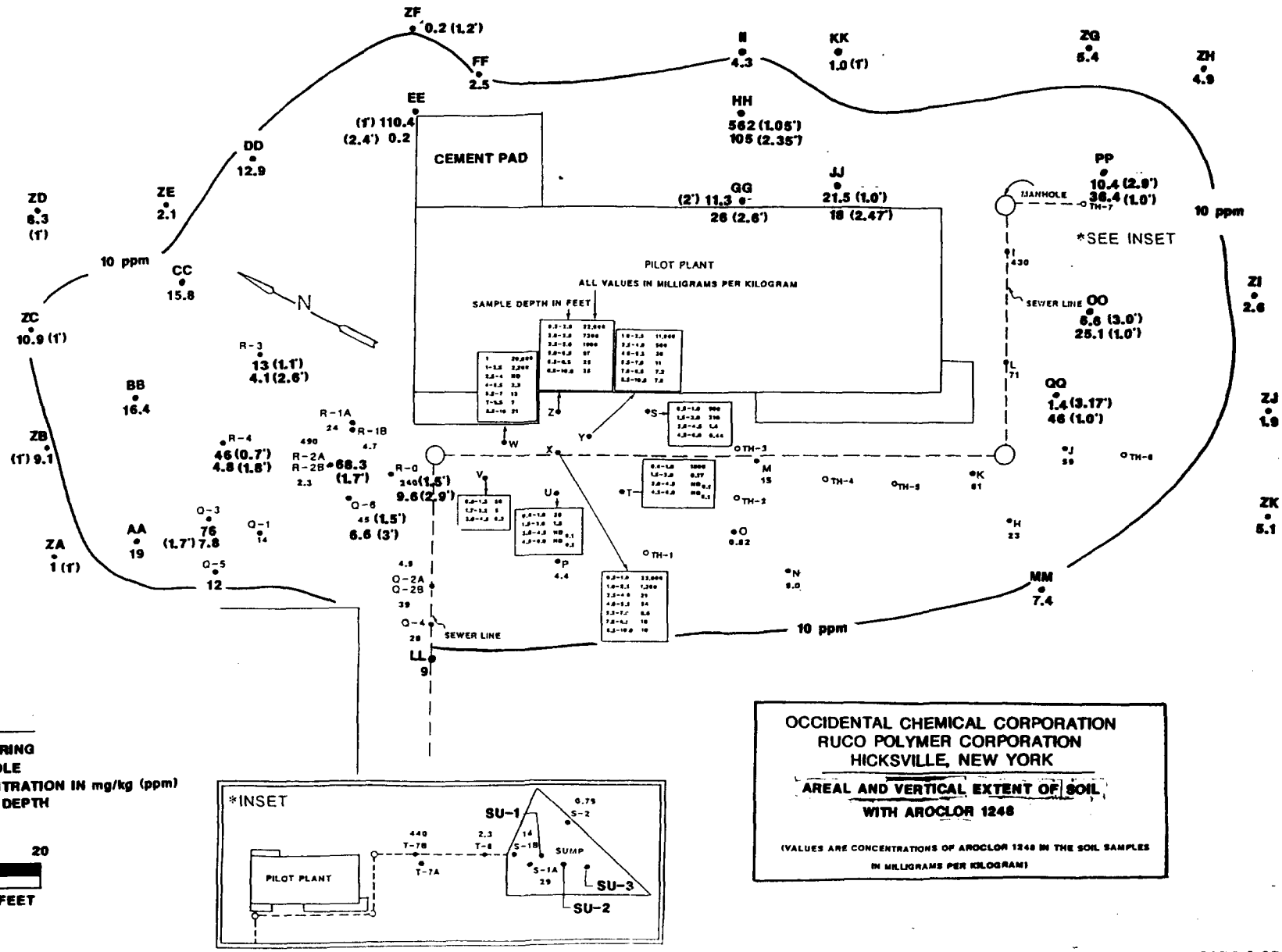
AIPG 5149 ROBERT LAMONICA

dmt
June 23, 1988
ldn881

HRC 001 0650

FIGURE

HRC 001 0651


ZF
0.2 (1.2')
FF
2.5
II
4.3
KK
1.0 (1')
ZG
5.4
ZH
4.9
EE
(1') 110.4
(2.4') 0.2
CEMENT PAD
HH
562 (1.05')
105 (2.35')
DD
12.9
ZD
6.3
(1')
ZE
2.1
GG
(2') 11.3
26 (2.6')
JJ
21.5 (1.0')
18 (2.47')
PP
10.4 (2.9')
36.4 (1.0')
MANHOLE
TH-7
10 ppm
*SEE INSET
10 ppm
CC
15.8
N
PILOT PLANT
ALL VALUES IN MILLIGRAMS PER KILOGRAM
SAMPLE DEPTH IN FEET
SEWER LINE
OO
6.6 (3.0')
25.1 (1.0')
ZI
2.6
ZC
10.9 (1')
R-3
13 (1.1')
4.1 (2.6')
BB
16.4
QQ
1.4 (3.17')
46 (1.0')
ZJ
1.9
ZB
(1') 9.1
R-4
46 (0.7')
4.8 (1.8')
R-1A
R-1B
R-2A
R-2B
68.3
(1.7')
R-0
240 (1.5')
9.6 (2.9')
TH-3
TH-4
TH-5
TH-6
TH-2
TH-1
Q-6
45 (1.5')
6.6 (3')
Q-3
76
(1.7') 7.8
Q-1
14
AA
19
ZA
1 (1')
Q-5
12
Q-2A
Q-2B
39
Q-4
29
SEWER LINE
LL
9
10 ppm
MM
7.4
ZK
5.1
*INSET
SU-1
SU-2
SU-3
PILOT PLANT
SUMP
T-7B
T-7A
T-8
S-1B
S-1A
S-2
LEGEND
SOIL BORING
TEST HOLE
10.4 CONCENTRATION IN mg/kg (ppm)
(2.9) SAMPLE DEPTH
0
10
20
SCALE IN FEET
OCCIDENTAL CHEMICAL CORPORATION
RUCO POLYMER CORPORATION
HICKSVILLE, NEW YORK
AREAL AND VERTICAL EXTENT OF SOIL
WITH AROCLOR 1248
(VALUES ARE CONCENTRATIONS OF AROCLOR 1248 IN THE SOIL SAMPLES
IN MILLIGRAMS PER KILOGRAM)
LEGGETTE, BRASHEARS & GRAHAM, INC.

TABLE

HRC 001 0653

TABLE 1

OCCIDENTAL CHEMICAL CORPORATION
RUCO POLYMER CORPORATION SITE
HICKSVILLE, NEW YORK

Vertical Extent of Aroclor Contamination in the Sump

Sump Boring #1		Sump Boring #2		Sump Boring #3	
Depth 1/	Concentration 2/	Depth	Concentraton	Depth	Concentration
0-1	0.2	0-1	176.5	0-2	94.8
1-2	92.1	1-2	49.7	2-4	NA
2-4	NA 3/	2-4	1.1	4.5-6.5	49.7
4-6	0.2	4-6	1.2	6.5-8.5	5.2
6.4-8.4	0.1	6.4-8.4	NA	8.5-10.5	0.8
		8.4-10.4	0.2		

1/ Depth in feet below the sump bottom.
2/ Aroclor 1248 in micrograms per gram.
3/ Not analyzed.

HRC 001 0654

APPENDIX I

HRC 001 0655

WELL LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.
CONSULTING GROUND-WATER GEOLOGISTS
72 DANBURY ROAD
WILTON, CT. 06897

OWNER Occidental Chemical
Hicksville, New York

WELL NO. SU-1

DATE 5/23/88 PAGE 1 OF 1 PAGES

LOCATION: Ruco Polymer Co. Hicksville, NY

DATE COMPLETED: March 16, 1988

DRILLING COMPANY: East Coast Drilling

DRILLING METHOD: Drive and Wash

SAMPLING METHOD: Split Spoon

SAMPLES EXAMINED BY: William D. Hammen

REFERENCE POINT: Grade

ELEVATION OF R.P.:

WELL CONSTRUCTION
SCREEN TYPE:
DIAM. SLOT NO.
SETTING:

GRAVEL PACK SIZE:

CASING:

DEVELOPMENT:

PUMPING TEST
DATE:
DURATION:
STATIC WATER LEVEL:
PUMPING WATER LEVEL:
YIELD:

REMARKS: Test boring is located in sump near water tower.

DEPTH IN FEET FROM	TO	DESCRIPTION
0	2	0 to 1 foot; Sand; coarse; iron-stained; some pebbles; trace gravel.
		1 to 2 feet; Sand and gravel; black/oily; some mud/sludge; black decreasing with depth; 2-foot recovery.
2	4	Sand and gravel; white/tan; some decomposed rock/gray; 1.2-foot recovery.
4	6	Sand and gravel; white/tan; quartz cobbles; 0.92-foot recovery.
6.4	8.4	Sand and gravel; white/tan; 0.60-foot recovery.
8.4	10.4	Sand and gravel; tan/white; 0.83-foot recovery.
10.4		End of test boring.

WELL LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.

CONSULTING GROUND-WATER GEOLOGISTS
72 DANBURY ROAD
WILTON, CT. 06897

OWNER: Occidental Chemical
Hicksville, New York

WELL NO.: SU-2

DATE: 5/23/88 PAGE 1 OF 1 PAGES

LOCATION: Ruco Polymer Co.
Hicksville, NY

DATE COMPLETED: March 17, 1988

DRILLING COMPANY: East Coast Drilling

DRILLING METHOD: Drive and Wash

SAMPLING METHOD: Split Spoon

SAMPLES EXAMINED BY: William D. Hammen

REFERENCE POINT: Grade

ELEVATION OF R.P.:

WELL CONSTRUCTION
SCREEN TYPE:
DIAM.: SLOT NO.:
SETTING:
GRAVEL PACK SIZE:
CASING:
DEVELOPMENT:

PUMPING TEST
DATE:
DURATION:
STATIC WATER LEVEL:
PUMPING WATER LEVEL:
YIELD:

REMARKS: Test boring is located in sump near water tower.

DEPTH IN FEET FROM	TO	DESCRIPTION
0	2	0 to 0.73 foot; Mud and silt; black; oily with iridescent spots.
		0.73 - 2 foot; Sand and gravel; tan/white with black spots; gray color overall; 1.2-feet recovery.
2	4	Sand and gravel; tan/white; some black mud/sludge; 0.5-foot recovery.
4	6	SAND and gravel; white/tan; 0 - 7.1 foot recovery.
6.9	8.9	Sand and gravel; tan/white; black specks; 0.55-foot recovery.
8.4	10.4	Sand and gravel; tan/white; 0.80-foot recovery.
10.4		End of test boring.

HRC 001 0657

WELL LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.
CONSULTING GROUND-WATER GEOLOGISTS
72 DANBURY ROAD
WILTON, CT. 06897

OWNER Occidental Chemical
Hicksville, New York

WELL NO. SU-3

DATE 5/19/88 PAGE 1 OF 1 PAGES

LOCATION: Ruco Polymer Co., Hicksville, NY
DATE COMPLETED: March 18, 1988
DRILLING COMPANY: East Coast Drilling
DRILLING METHOD: Drive and Wash
SAMPLING METHOD: Split Spoon
SAMPLES EXAMINED BY: William D. Hammen
REFERENCE POINT: Grade
ELEVATION OF R.P.:
WELL CONSTRUCTION
SCREEN TYPE:
DIAM.: SLOT NO.:
SETTING:
GRAVEL PACK SIZE:
CASING:
DEVELOPMENT:
PUMPING TEST
DATE:
DURATION:
STATIC WATER LEVEL:
PUMPING WATER LEVEL:
YIELD:
REMARKS: Test boring is located in sump near water tower.

DEPTH IN FEET FROM	TO	DESCRIPTION
0	2	Sand and gravel; black/gray/brown; some silt and organics; wet; 0.71-foot recovery.
2	4	Sand and gravel; brown/gray; some silt/sludge/mud; black/gray; 0.52-foot recovery.
4.5	6.5	Sand and gravel; white/tan darkening to gray/black with depth; some brown patches; 0.78-foot recovery.
6.5	8.5	Sand and gravel; gray/white; trace fine sand near bottom of spoon; 1.36-foot recovery.
8.5	10.5	Sand and gravel; tan/white; some black flecks; 0.82-foot recovery.
10.5		END OF TEST BORING.

HRC 001 0658

.ast Coast Drilling & Boring, Inc.

P.O. BOX 961 • WALLINGFORD, CT 06492

Bit # _____ Ftg. _____

Bit # _____ Ftg. _____

TO Leggette, Brashears & Graham | ADDRESS Wilton, CT.

PROJECT NAME Ruco Polymer | LOCATION Hicksville, NY

REPORT SENT TO Client | PROJ. NO. _____

SAMPLES SENT TO Taken at Site | OUR JOB NO. 88-188

SHEET 1 OF 1

DATE 3-18-88

HOLE NO. SU-1

LINE & STA. _____

OFFSET _____

GROUND WATER OBSERVATIONS

At Surface after _____ Hours

At _____ after _____ Hours

	CASING	SAMPLER	CORE BAR.
Type	HW	SS	
Size I.D.	4"	2"	
Hammer Wt.	140 lb	140 lb	BIT
Hammer Fall	20	30	

SURFACE ELEV. _____

DATE STARTED 3-16-88

DATE COMPL. 3-16-88

BORING FOREMAN L. Fredericks

INSPECTOR Bill Hammea

SOILS ENGR. _____

LOCATION OF BORING: _____

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	To 6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE No	Pen	Rec.
		0.0'-2.0'	D	7	17	24	Wet		Water. Black Light Brown fine	1	2.0'	2.0'
						37	V.Dense	2.0'	medium Sand and Gravel.			
		2.0'-4.0'	D	45	45	45	Wet		Light Brown, White, fine coarse	2	2.0'	1.2'
						47	V.Dense		Sand and Gravel.			
		4.0'-6.0'	D	80	82	65	Wet		" " "	3	2.0'	0.8'
						51	V.Dense					
		6.0'-6.4'	D	150/	4		Wet		NO Recovery	-	0.4'	NR
							V.Dense					
		6.4'-8.4'	D	30	30	30	Wet		Light Brown, White, fine coarse	4	2.0'	0.6'
						30	V.Dense		Sand and Gravel.			
		8.4'-10.4'	D	30	30	27	Wet	10.4'	" " "	5	2.0'	0.8'
						25	V.Dense					
									Bottom of Boring at 10.4'			

HRC 001 0659

GROUND SURFACE TO 8.4' USED HW "CASING: THEN Sampled to 10.4'

Sample Type
D=Dry C=Cored W=Washed
UP=Undisturbed Piston
TP=Test Pit A=Auger V=Vane Test
UT=Undisturbed Thinwall

Proportions Used
trace 0 to 10%
little 10 to 20%
some 20 to 35%
and 35 to 50%

140 lb Wt. x 30" fall on 2" O.D. Sampler

Cohesionless Density		Cohesive Consistency	
0-10	Loose	0-4	Soft
10-30	Med. Dense	4-8	M/Stiff
30-50	Dense	8-15	Stiff
50 +	Very Dense	15-30	V-Stiff
		30 +	Hard

SUMMARY:
Earth Boring 10.4'
Rock Coring _____
Samples 5

HOLE NO SU-1

East Coast Drilling & Boring, Inc.

P.O. BOX 961 • WALLINGFORD, CT 06492

Bit # _____ Ftg _____

Bit # _____ Ftg _____

SHEET 1 OF 1
DATE 3-18-88
HOLE NO. SU-2
LINE & STA. _____
OFFSET _____

TO Leggette, Brashears & Graham
ADDRESS Wilton, CT.
PROJECT NAME Ruco Polymer
LOCATION Hicksville, NY
REPORT SENT TO Client
PROJ. NO. _____
SAMPLES SENT TO Taken at Site
OUR JOB NO. 88-188

GROUND WATER OBSERVATIONS

At Surface after _____ Hours

At _____ after _____ Hours

	CASING	SAMPLER	CORE BAR.
Type	HW	SS	
Size I.D.	4"	3"	
Hammer Wt.	140 lb	140 lb	BIT
Hammer Fall	20	30	

SURFACE ELEV. _____
DATE STARTED 3-16-88
DATE COMPL. 3-17-88
BORING FOREMAN L. Fredericks
INSPECTOR Bill Hammea
SOILS ENGR. _____

LOCATION OF BORING: _____

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	To 6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE No	Pen	Rec.
		0.0'-2.0'	D	9	18	20	Wet		Water, 2' Deep Sample is from	1	2.0'	1.2'
						30	V.Dense		surface of Soil on Bottom.			
		2.0'-4.0'	D	28	25	40	Wet		Black fine medium Sand, some fine	2	2.0'	0.5'
						51	V.Dense	0.7'	Gravel, some Silt.			
		4.0'-6.0'	D	52	56	42	Wet		Light Brown White, fine coarse	3	2.0'	0.8'
						50	V.Dense		Sand and Gravel.			
		6.0'-6.9'	D	58	150/.4		Wet		" " "	4	0.9'	0.9'
							V.Dense		" " "			
		6.9'-8.9'	D	58	80	31	Wet		" " "	5	2.0'	0.6'
						33	V.Dense					
		8.9'-10.9'	D	17	17	15	Wet		" " "	6	2.0'	0.8
						24	Dense	10.9'	" " "			
									Bottom of Boring at 10.9'			

HRC 001 0660

GROUND SURFACE TO 8.9' USED HW "CASING: THEN Sampled to 10.9'

Sample Type
D=Dry C=Cored W=Washed
UP=Undisturbed Piston
TP=Test Pit A=Auger V=Vane Test
UT=Undisturbed Thinwall

Proportions Used
trace 0 to 10%
little 10 to 20%
some 20 to 35%
and 35 to 50%

140 lb Wt. x 30" fall on 2" O.D. Sampler

Cohesionless Density		Cohesive Consistency		
0-10	Loose	0-4	Soft	30 + Hard
10-30	Med. Dense	4-8	M/Stiff	
30-50	Dense	8-15	Stiff	
50 +	Very Dense	15-30	V-Stiff	

SUMMARY:
Earth Boring 10.9'
Rock Coring _____
Samples 6

HOLE NO SU-2

East Coast Drilling & Boring, Inc.

P.O. BOX 961 • WALLINGFORD, CT 06492

Bit # _____ Ftg _____

Bit # _____ Ftg. _____

SHEET 1 OF 1
DATE 3-21-88
HOLE NO. SU-3
LINE & STA. _____
OFFSET _____

TO Leggette, Brashears & Graham
ADDRESS Wilton, CT.
PROJECT NAME Ruco Polymer
LOCATION Hicksville, NY
REPORT SENT TO Client
PROJ. NO. _____
SAMPLES SENT TO Taken at Site
OUR JOB NO. 88-188

GROUND WATER OBSERVATIONS

At 1.0' after 0 Hours

At _____ after ___ Hours

	CASING	SAMPLER	CORE BAR.
Type	HW	SS	
Size I.D.	4"	3"	
Hammer Wt.	140 lb	140 lb	BIT
Hammer Fall	20	30	

SURFACE ELEV. _____
DATE STARTED 3-17-88
DATE COMPL. 3-18-88
BORING FOREMAN Larry Frederick
INSPECTOR Bill H.
SOILS ENGR. _____

LOCATION OF BORING: _____

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	To 6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE No.	Pen	Rec.
		0.0'-2.0'	D	2	4	7	Wet		Brown Black fine medium Sand and	1	2.0'	0.7'
						8	Med.Dense		Gravel.			
		2.0'-4.0'	D	8	8	10	Wet		Brown fine medium Sand and Gravel.	2	2.0'	0.5'
						12	Med.Dense					
		4.0'-4.5'	D	150/.5			Wet		NO Recovery	-	0.5'	NR
							V.Dense					
		4.5'-6.5'	D	50	50	32	Wet		Brown fine medium Sand and Gravel.	3	2.0'	0.8'
						30	V.Dense					
		6.5'-8.5'	D	35	30	26	Wet		" " "	4	2.0'	1.5'
						43	V.Dense					
		8.5'-10.5'	D	9	38	37	Wet	10.5'	" " "	5	2.0'	0.8'
						56	V.Dense		Refusal at 10.5'			

GROUND SURFACE TO 8.5' USED HW "CASING: THEN Sampled to 10.5'

Sample Type
D=Dry C=Cored W=Washed
UP=Undisturbed Piston
TP=Test Pit A=Auger V=Vane Test
UT=Undisturbed Thinwall

Proportions Used
trace 0 to 10%
little 10 to 20%
some 20 to 35%
and 35 to 50%

140 lb Wt. x 30" fall on 2" O.D. Sampler

Cohesionless Density		Cohesive Consistency		
0-10	Loose	0-4	Soft	30 + Hard
10-30	Med. Dense	4-8	M/Stiff	
30-50	Dense	8-15	Stiff	
50 +	Very Dense	15-30	V-Stiff	

SUMMARY
Earth Boring 10.5'
Rock Coring _____
Samples 5

HOLE NO SU-3

HRC 001 0661

APPENDIX II

HRC 001 0662

OxyChem
Technology Center

MEMO

To A. F. Weston **Date** April 11, 1988

From R. Cortellucci

Subject AROCLOR 1248 CONTENT OF THE SOILS FROM HICKSVILLE, NY

COPIES: R.G. Badger, P.T. Holt, W.E. Leroux, TIC

PROJECT PERSONNEL: W. Fenlon

SPECIAL ENVIRONMENTAL
APR 13 REC'D

SUMMARY

On February 18, 1988, twenty-one soil samples from Hicksville, NY were submitted for determination of their Aroclor 1248 content. Of those samples submitted, nine sites had concentrations of Aroclor 1248 higher than 10 ppm, and of those nine sites two had concentrations higher than 100 ppm. The remaining eleven sites had Aroclor 1248 concentrations less than 10 ppm.

INTRODUCTION

In order to determine the extent of contamination, soil samples from twenty-one sites at Hicksville, New York were analyzed for their Aroclor 1248 content. These samples were analyzed using the EPA CLP methodology, making slight variations of the method where needed.

EXPERIMENTAL

Before the work-up, each sample was forced through a #8 mesh sieve to separate the friable material from the non-friable material, (U.S. Standard Testing Sieve, #8 mesh, A.S.T.E-11 specifications, 2.36 mm opening). After sieving, the soils were tumbled for one hour to improve homogeneity (Rotary Tumbler, Model 33B, Lortone, Inc.). These sample were now ready for analysis. One gram of sample was transferred to a 50 mL beaker, sodium sulfate was stirred in until the sample had a sandy texture, 50 uL of 20 ppm hexachlorobenzene (C66) in acetone was added as an internal standard and 10.0 mL of hexane was then added as the extraction solvent. The sample was then extracted for two minutes using a sonic distrupter (heat Systems, Ultrasonics, Inc.), after which time the extract was decanted to a 7 mL Teflon-lined screw-top vial until analysis. Recovery experiments were performed in the same manner, with the addition of Aroclor 1248 occurring before the addition of hexane.

Determination of the moisture content of each sample was done by transferring approximately five grams (0.01 g accuracy) to a tared aluminum pan and heating for two hours at 110°C. After cooling in a dessicator, the samples were re-weighed and the moisture content was determined.

OxyChem

RESULTS AND DISCUSSION

The results of this analysis can be found in Table I. The concentration of Aroclor 1248 is given in ug/g on a dry weight basis. Also given in Table I are the recoveries of the C66 surrogate, expressed as a percent of the original 1.0 ug added. Because it was not required by the CLP this figure has not been corrected for percent moisture.

Table II contains the results of two duplicate analyses. Sites 233 and 242 were chosen for duplicate analysis. After weighing out two portions for duplicate analysis, a third portion was weighed out for spiking purposes. Site 233 was spiked with a 1 ug/g Aroclor 1248, Site 242 was spiked with 10 ug/g of Aroclor 1248, while Site 254 was spiked with 5 ug/g of Aroclor 1248. This data is found in Table III. Spiking three different samples at three different levels provided an extra dimension to the recovery process. Table IV contains the moisture content of each soil. Percent moisture was determined by:

$$\frac{\text{grams wet weight - grams dry weight}}{\text{grams wet weight}} \times 100$$

Remi Cortellucci

Remi Cortellucci
Chemist
Central Sciences

/jb
Attachments

OxyChem

TABLE I

Concentration of Aroclor1248
Hicksville, N.Y.
ug/g dry weight basis

Sample I.D.	OCC Log #	Aroclor 1248	% C66 Recovery
S-233ZA001A1	88-469	1.0*	101
S-234ZB001A1	88-470	9.1	129
S-235ZC001A1	88-471	10.9	107
S-236ZD001A1	88-472	8.3	109
S-237ZE001A1	88-473	2.1	109
S-238EE002A1	88-476	0.2	71
S-239ZF001A1	88-474	0.2	102
S-240GG002A1	88-475	26.0	104
S-241HH002A1	88-477	105.3	117
S-242JJ002A1	88-478	18.0*	116
S-248GG003A1	88-484	192.7	120
S-249PP002A1	88-485	36.4	133
S-25000002A1	88-486	25.1	124
S-251QQ002A1	88-487	46.0	133
S-252Q6002A1	88-488	6.6	102
S-253R0002A1	88-489	9.6	131
S-254R3002A1	88-490	4.1	224
S-255R4002A1	88-491	4.8	126
S-256R2003A1	88-492	68.3	125
S-257Q3002A1	88-493	7.8	106
S-258FB001A1	88-494	ND0.1	51

* Represents the average of duplicate results.

OxyChem

TABLE II

Results of Duplicate Analysis
Hicksville, N.Y.
ug/g dry weight basis

Sample I.D.	Experiment #1	Experiment #2
S-233ZA001A1	0.99	0.96
S-242JJ002A1	16.1	19.9

TABLE III

Results of Spiking Experiments
Hicksville, N.Y.
ug/g dry weight basis

Samplé I.D.	Analysis	Added	Expected	Found	Recovered (%)
S-233ZA001A1	1.0	1.0	2.0	1.94	0.94 (94)
S-242JJ002A1	18.0	10.0	28.0	30.6	12.6 (126)
S-254R3002A1	4.1	5.0	9.1	11.6	7.5 (150)

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TABLE IV

Moisture Content
Soils From Hicksville, N.Y.

Sample I.D.	% Moisture
S-233ZA001A1	5.65
S-234ZB001A1	7.17
S-235ZC001A1	8.06
S-236AD001A1	9.25
S-237ZE001A1	8.59
S-238EE002A1	16.93
S-239ZF001A1	10.25
S-240GG002A1	16.67
S-241HH002A1	12.11
S-242JJ002A1	14.34
S-248GG003A1	19.14
S-249PP002A1	13.04
S-25000002A1	6.58
S-251QQ002A1	9.71
S-252Q6002A1	8.12
S-253R0002A1	11.72
S-254R3002A1	11.30
S-255R4002A1	9.62
S-256R2003A1	14.45
S-257Q3002A1	7.23
S-258FB001A1	19.62

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-252G6CC2A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-488 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	.15	.35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0668

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-253RC002A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-489 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1	15	35	Y	
02	Column 2				
03	Column 1				
04	Column 2				
05	Column 1				
06	Column 2				
07	Column 1				
08	Column 2				
09	Column 1				
10	Column 2				
11	Column 1				
12	Column 2				

Comments: _____

HRC 001 0669

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-254R3CC241

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-490 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1	15	35	Y	
02	Column 2				
03	Column 1				
04	Column 2				
05	Column 1				
06	Column 2				
07	Column 1				
08	Column 2				
09	Column 1				
10	Column 2				
11	Column 1				
12	Column 2				

Comments: _____

HRC 001 0670

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-255R4C02A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-491 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1		1.5	3.5	Y	
02	Column 2					
03	Column 1					
04	Column 2					
05	Column 1					
06	Column 2					
07	Column 1					
08	Column 2					
09	Column 1					
10	Column 2					
11	Column 1					
12	Column 2					

Comments: _____

HRC 001 0671

page __ of __

FORM X PEST

10/86

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-256R2CC3A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-492 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0672

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-257G3002A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-493 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1		15	35	Y	
02	Column 2					
03	Column 1					
04	Column 2					
05	Column 1					
06	Column 2					
07	Column 1					
08	Column 2					
09	Column 1					
10	Column 2					
11	Column 1					
12	Column 2					

Comments: _____

HRC 001 0673

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-258FBC01A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP5840 Instrument ID (2): _____

Lab Sample ID (1): 88-494 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1		15	35	Y	
02	Column 2					
03	Column 1					
04	Column 2					
05	Column 1					
06	Column 2					
07	Column 1					
08	Column 2					
09	Column 1					
10	Column 2					
11	Column 1					
12	Column 2					

Comments: _____

HRC 001 0674

OxyChem **MEMO**

Technology Center

To A. F. Westcott **Date** April 13, 1988

From R. Cortellucci

Subject AROCLOR 1248 CONTENT OF THE SOILS FROM HICKSVILLE, NY

SPECIAL ENVIRONMENTAL

APR 15 REC'D

COPIES: R.G. Badger, P.T. Holt, W.E. Leroux, TIC

PROJECT PERSONNEL: W. Fenlon

SUMMARY

On March 24, 1988, eleven (11) soil samples from Hicksville, NY were submitted for determination of their Aroclor 1248 content. Of those samples submitted, five sites had concentrations of Aroclor 1248 higher than 10 ppm, and of those five sites, one had concentrations higher than 100 ppm. The remaining six sites had Aroclor 1248 concentrations less than 10 ppm.

INTRODUCTION

In order to determine the extent of contamination, soil samples from eleven sites at Hicksville, New York were analyzed for their Aroclor 1248 content. These samples were analyzed using the EPA CLP methodology, making slight variations of the method where needed.

EXPERIMENTAL

Before the work-up, each sample was forced through a #8 sieve to separate the friable material from the non-friable material (U.S. Standard Testing Sieve, #8 mesh, A.S.T.E.-11 specifications, 2.36 mm opening). After sieving, the soils were tumbled for one hour to improve homogeneity (Rotary Tumbler, Model 33B, Lortone, Inc.). These samples were now ready for analysis. One gram of sample was transferred to a 50 mL beaker, sodium sulfate was stirred in until the sample had a sandy texture, 50 uL of 20 ppm hexachlorobenzene (C66) in acetone was added as an internal standard and 10.0 mL of hexane was then added as the extraction solvent. The sample was then extracted for two minutes using a sonic distrupter (Heat Systems, Ultrasonics, Inc.), after which time the extract was decanted to 5 mL Teflon-lined screw-top vial until analysis. Recovery experiments were performed in the same manner, with the addition of Aroclor 1248 occurring before the addition of hexane.

Determination of the moisture content of each sample was done by transferring approximately five grams (0.01 g accuracy) to a tared aluminum pan and heating for two hours at 110°C. After cooling in a dessicator, the samples were re-weighed and the moisture content was determined.

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RESULTS AND DISCUSSION

The results of this analysis can be found in Table I. The concentration of Aroclor 1248 is given in ug/g on a dry weight basis. Also given in Table I are the recoveries of the C66 surrogate, expressed as a percent of the original 1.0 ug added. Because it was not required by the CLP this figure has not been corrected for percent moisture.

Table II contains the results of two duplicate analysis. Sites 268 and 273 were chosen for duplicate analysis. After weighing out two portions for duplicate analysis, a third portion was weighed out for spiking purposes. Site 268 was spiked with 1 ug/g Aroclor 1248 and site 273 was spiked with 25 ug/g of Aroclor 1248. This data is found in Table III. Table IV contains the moisture content of each soil. Percent moisture was determined by:

$$\frac{\text{grams wet weight - grams dry weight}}{\text{grams wet weight}} \times 100$$

Remi Cortellucci

Remi Cortellucci
Chemist
Central Sciences

/jb
Attachments

OxyChem

TABLE I

Results of Duplicate Analysis
ug/g Dry Weight Basis

Sample I.D.	OCC Log #	Aroclor 1248	% C66 Recovery
259SU001A1	88-1023	0.2	77
260SU002A1	88-1024	92.1	79
262SU004A1	88-1026	0.2	108
264SU006A1	88-1028	0.1	91
265SU001A1	88-1029	176.5	74
266SU002A1	88-1030	49.7	87
268SU004A1	88-1032	1.2*	111
270SU006A1	88-1034	0.2	95
271SU001A1	88-1035	94.8	95
273SU003A1	88-1037	49.7*	105
275SU005A1	88-1039	0.8	107

* Represents the average of duplicate results.

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TABLE II

Results of Duplicate Analysis
ug/g dry weight basis

Sample I.D.	Exp. 1	Exp. 2
268SU004A1	1.0	1.4
273SU003A1	48.2	51.2

TABLE III

Results of Spiking Experiments
ug/g dry weight basis

Sample I.D.	Analysis	Added	Expected	Found	Recovery (%)
268SU004A1	1.2	0.78	1.98	1.6	0.4 (51)
273SU003A1	49.7	20.2	69.9	76.8	27.1 (134)

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TABLE IV

Moisture Content
Soils from Hicksville, N.Y.

Sample I.D.	% Moisture
259SU001A1	13.95
260SU002A1	22.12
262SU004A1	2.98
264SU006A1	8.84
265SU001A1	25.57
266SU002A1	6.45
268SU004A1	8.92
270SU006A1	9.71
271SU001A1	13.95
273SU003A1	9.34
275SU005A1	12.11

LEGGETTE, BRASHEARS & GRAHAM, INC.

CONSULTING HYDROGEOLOGISTS — 72 DANBURY RD. WILTON CT. 06897 — (203) 762-1207

PROJ. NO.

CLIENT/LOCATION: Occidental Hicksville

SAMPLERS: (Signature)

STA. NO.	DATE	TIME	PUMP	BAIL	REMARKS/ COLOR, ODOR, ETC.	NO. OF CONTAINERS	TYPE OF SAMPLE (SOIL, GW, SW, ETC.)	PRODUCT PRESENT	TEMP.	pH	CONDUCTIVITY	PARAMETERS TO BE ANALYSED FOR
SU-1	3/16	10:16			259SU001A1 0-1bg	1	Soil					Aroclor 1248
SU-1	3/16	10:16			260SU002A1 1-2bg	1	Soil					
SU-1	3/16				261SU003A0 2-4bg	1	Soil					
SU-1	3/16	1333			262SU004A1 4-6bg	1	Soil					
SU-1	3/16	1406			263SU005A0 6.9-8.9bg	1	Soil					
SU-1	3/16	1411			264SU006A1 8.9-10.9bg	1	Soil					
SU-2	3/16	1512			265SU001A1 0-2bg	1	Soil					
SU-2	3/16	1512			266SU002A1 0-2bg	1	Soil					
SU-2	3/16	1531			267SU003A0 2-4bg	1	Soil					
SU-2	3/16	1620			268SU004A1 4-6bg	1	Soil					
SU-2	3/17	0838			269SU005A0 6.9-8.9	1	Soil					
SU-2	3/17	0847			270SU006A1 8.9-10.9bg	1	Soil					
SU-3	3/17	0920			271SU001A1 0-2bg	1	Soil					WEATHER CONDITIONS
SU-3	3/17	0932			272SU002A0 2-4bg	1	Soil					
SU-3	3/17	1017			273SU003A1 4.5-6.5bg	1	Soil					

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Relinquished by: (Signature)**	**Date / Time**	**Received by: (Signature)**
Relinquished by: (Signature)	**Date / Time**	**Received for Laboratory by: (Signature)**	**Date / Time**	**Remarks**	

CHAIN OF CUSTODY

HRC 001 0680

LEGGETTE, BRASHLARS & GRAHAM, INC.

CONSULTING HYDROGEOLOGISTS — 72 DANBURY RD. WILTON CT. 06897 — (203) 762-1207

PROJ. NO.

CLIENT/LOCATION: Occi/Hicksville

SAMPLERS: (Signature)

STA. NO.	DATE	TIME	PUMP	BAIL	REMARKS/ COLOR, ODOR, ETC.	NO. OF CONTAINERS	TYPE OF SAMPLE (SOIL, GW, SW, ETC.)	PRODUCT PRESENT	TEMP.	pH	CONDUCTIVITY	PARAMETERS TO BE ANALYSED FOR
SL-3	3/17	10:25			274SL004A0 6.5-8.5 kg	1	Soil					Aroclor 1248
SL-3	3/18	0929			275SL005A1 8.5-10.5 kg	1	Soil					

WEATHER CONDITIONS

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	

CHAIN OF CUSTODY

HRC 001 0681

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

259SUC01A1

Lab Name: Occidental Chemical Corp Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1023

Sample wt/vol: 1.06 (g/mL) L Lab File ID: _____

Level: (low/med) Low Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/30/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/5/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	0.2	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0682

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

260SU0C241

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1124

Sample wt/vol: 1.98 (g/mL) G Lab File ID: _____

Level: (low/med) Med Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/30/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/5/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	92.1	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0683

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

262511004A1

Lab Name: Occidental Chemical Corp Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1026

Sample wt/vol: 1.29 (g/mL) ____ Lab File ID: _____

Level: (low/med) Low Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/30/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/5/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	0.2	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0684

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

264SU006A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1025

Sample wt/vol: 1.39 (g/mL) 10 Lab File ID: _____

Level: (low/med) Low Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/30/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/5/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	0.1	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0685

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

265SUCC1A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1629

Sample wt/vol: 1.15 (g/mL) LC Lab File ID: _____

Level: (low/med) Med Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/30/88

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 4/5/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	176.5	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0686

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

266SU002A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1050

Sample wt/vol: 1.23 (g/mL) L Lab File ID: _____

Level: (low/med) Med Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/30/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/5/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	49.7	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0687

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

268SU004.41

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1032

Sample wt/vol: 1.23 (g/mL) U Lab File ID: _____

Level: (low/med) Low Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/30/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/5/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	1.2	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0688

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

270SU006A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1634

Sample wt/vol: 1.23 (g/mL) lC Lab File ID: _____

Level: (low/med) Low Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/30/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/5/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	0.2	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0689

LEGGETTE, BRASHEARS & GRAHAM, INC.

CONSULTING HYDROGEOLOGISTS — 72 DANBURY RD, WILTON CT. 06897 (203) 762-1207

PROJ. NO.

CLIENT/LOCATION: Occidental / Hicksville

SAMPLERS: (Signature) Ed Desiderio / Roger Carpenter

STA. NO.	DATE	TIME	PUMP	BAIL	REMARKS/ COLOR, ODOR, ETC.	NO. OF CONTAINERS	TYPE OF SAMPLE (SOIL, GW, SW, ETC.)	PRODUCT PRESENT	TEMP.	pH	CONDUCTIVITY	PARAMETERS TO BE ANALYSED FOR
Ran	2-17	1231			S233ZA001A1	1	Soil					PCB's
"	2-17	1258			S234ZB001A1	1	Soil					
"	2-17	1312			S235ZC001A1	1	Soil					
"	2-17	1324			S236ZD001A1	1	Soil					
"	2-17	1410			S237ZE001A1	1	Soil					
"	2-17	1453			S239ZF001A1	1	Soil					
"	2-17	1544			S240GG002A1	1	Soil					
"	2-17	1439			S238EE002A1	1	Soil					
"	2-17	1534			S241HH002A1	1	Soil					
"	2-17	1605			S242JJ002A1	1	Soil					
	2-18	1035			S243ZG001A1	1	Soil					
	2-18	1058			S244ZH001A1	1	Soil					
	2-18	1122			S245ZI001A1	1	Soil					
	2-18	1130			S246ZJ001A1	1	Soil					
	2-18	1154			S247ZK001A1	1	Soil					

WEATHER CONDITIONS: 10°F, Sunny - clear sky

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Ed Desiderio					
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	

CHAIN OF CUSTODY

HRC 001 0690

LEGGETTE, BRASHEARS & GRAHAM, INC.

CONSULTING HYDROGEOLOGISTS — 72 DANBURY RD, WILTON CT. 06897 (203) 762-1207

PROJ. NO.

CLIENT/LOCATION: Occidental / Hicksville

SAMPLERS: (Signature) Ed Davis / Roger Carpenter

STA. NO.	DATE	TIME	PUMP	BAIL	REMARKS/ COLOR, ODOR, ETC.	NO. OF CONTAINERS	TYPE OF SAMPLE (SOIL, GW, SW, ETC.)	PRODUCT PRESENT	TEMP.	pH	CONDUCTIVITY	PARAMETERS TO BE ANALYSED FOR
"	2-18	1116			S248GG003A1	1	Soil					PCB's
"	2-18	124			S249PP002A1	1	Soil					
"	2-18	1253			S250OO002A1	1	Soil					
"	2-18	1304			S251QQ002A1	1	Soil					
"	2-18	1333			S252QG002A1	1	Soil					
"	2-18	1348			S253R0002A1	1	Soil					
"	2-18	1406			S254R3002A1	1	Soil					
"	2-18	1443			S255R4002A1	1	Soil					
"	2-18	1422			S256R2003A1	1	Soil					
"	2-18	1455			S257Q3002A1	1	Soil					
"	2-18	1505			S258FB001A1	1	Soil					

WEATHER CONDITIONS: 40°F Sunny clear skies

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Ed Davis					
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	

CHAIN OF CUSTODY

HRC 001 0691

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-233ZAC01A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-469

Sample wt/vol: 1.09 (g/mL) lc Lab File ID: _____

Level: (low/med) Low Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	1.0	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

SPECIAL ENVIRONMENTAL
APR 13 REC'D

HRC 001 0692

FORM I PEST 10/86

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-234ZBCC141

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-470

Sample wt/vol: 1.08 (g/mL) lc Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	9.1	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0693

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-235ZC001A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-471

Sample wt/vol: 1.25 (g/mL) L Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	10.9	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0694

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-236ZD06141

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-472

Sample wt/vol: 1.31 (g/mL) U Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	8.3	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0695

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-237ZE001A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-473

Sample wt/vol: 1.37 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	2.1	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0696

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-238EECC2A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-476

Sample wt/vol: 1.19 (g/mL) 10 Lab File ID: _____

Level: (low/med) Low Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonic Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	6.2	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0697

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-239ZFCC1A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-474

Sample wt/vol: 1.34 (g/mL) L Lab File ID: _____

Level: (low/med) Low Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/29/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	0.2	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0698

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-240GG002A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-475

Sample wt/vol: 2.96 (g/mL) G Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	26.C	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0699

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-241HH002A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-477

Sample wt/vol: 2.11 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/31/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	105.3	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0700

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S242JJ002A1

ab Name: Occidental Chemical Corp. Contract: _____

ab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-478

Sample wt/vol: 1.40 (g/mL) G Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/31/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	18.0	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0701

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-248GECC3A1

Lab Name: Occidental Chemical Corp Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-484

Sample wt/vol: 1.25 (g/mL) lc Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/31/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	192.7	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HPC 001 0702

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-249PPCC241

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-485

Sample wt/vol: 1.87 (g/mL) IC Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/31/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	36.4	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0703

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-250000241

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-486

Sample wt/vol: 1.63 (g/mL) N Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/31/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	25.1	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0704

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-25/GQ0C2A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-487

Sample wt/vol: 1.90 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 2/15/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/31/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	46.0	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0705

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-252GCC241

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-488

Sample wt/vol: 1.87 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	6.6	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0706

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-253RC002.41

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-489

Sample wt/vol: 1.05 (g/mL) G Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	9.6	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0707

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-254R3002.41

Lab Name: Occidental Chemical Corp Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-490

Sample wt/vol: 1.77 (g/mL) G Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	4.1	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

FRC 001 0708

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-255R4CC2A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-491

Sample wt/vol: 2.00 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	4.8	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0709

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S256R2CC3A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-492

Sample wt/vol: 1.54 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/31/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	68.3	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0710

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-257G3CC241

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-493

Sample wt/vol: 1.20 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 2/19/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/30/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	7.8	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0711

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-258FBCC1A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-494

Sample wt/vol: 1.56 (g/mL) N Lab File ID: _____

Level: (low/med) low Date Received: 2/18/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/28/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 3/29/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	N.D. C.I	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0712

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Level: (low/med) Med.

	EPA SAMPLE NO.	S1 (C66) #	OTHER
01	S-233ZACC1A1	101	
02	S-234ZBCC1A1	129	
03	S-235ZCCC1A1	107	
04	S-236ZDCC1A1	108	
05	S-237ZECC1A1	109	
06	S-238EECC2A1	71	
07	S-239ZFCC1A1	102	
08	S-240EGCC2A1	104	
09	S-241HHCC2A1	117	
10	S-242JJCC2A1	116	
11	S-248GGCC3A1	120	
12	S-249HHCC2A1	133	
13	S-250CCCC2A1	124	
14	S-251BBCC3A1	133	
15	S-252BBCC2A1	102	
16	S-253BCCC2A1	131	
17	S-254B3CC2A1	224	
18	S-255B4CC2A1	126	
19	S-256B2CC3A1	125	
20	S-257B3CC2A1	106	
21	S-258BCC1A1	51	
22			
23			
24			
25			
26			
27			
28			
29			
30			

S1 (C66) = Hexachlorobenzene

ADVISORY QC LIMITS (24-154)

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

HRC 001 0713

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: Occidental Chemical Corp Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

EPA Sample No. for Method Blank: _____ Lab Sample ID: 88-494

Matrix: (soil/water) Soil Level: (low/med) Med Lab File ID: _____

Date Extracted: 3/17/88 Extraction: (SepF/Cont/Sonc) Sonc

Date Analyzed (1): 3/20/88 Date Analyzed (2): _____

Time Analyzed (1): 20:38 Time Analyzed (2): _____

Instrument ID (1): HP5840 Instrument ID (2): _____

GC Column ID (1): DB-5 GC Column ID (2): _____

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

	EPA SAMPLE NO.	LAB SAMPLE ID (1)	DATE ANALYZED 1	LAB SAMPLE ID (2)	DATE ANALYZED 2
01	5-258FBCCIA1	88-494	3/20/88		
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

COMMENTS: _____

HRC 001 0714

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: Hp 5840 GC Column ID: DB-5

DATE(S) OF ANALYSIS FROM: 3/29/88 TO: 4/1/88		DATE OF ANALYSIS 3/30/88
TIME(S) OF ANALYSIS FROM: _____ TO: _____		TIME OF ANALYSIS 0348
		LAB SAMPLE ID (STANDARD) A-mix

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC								
Heptaclor								
Aldrin								
Hept. Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endo.Sulfate								
4,4'-DDT								
Methoxychlor								
Endrin Ketone								
a. Chlordane								
g. Chlordane								
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248		15.0	35.0	.391CCC			Y	
Aroclor-1254								
Aroclor-1260								

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

HRC 001 0715

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-233ZACC141

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP 5840 Instrument ID (2): _____

Lab Sample ID (1): 88-469 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1	15	35	Y	
02	Column 2				
03	Column 1				
04	Column 2				
05	Column 1				
06	Column 2				
07	Column 1				
08	Column 2				
09	Column 1				
10	Column 2				
11	Column 1				
12	Column 2				

Comments: _____

HRC 001 0716

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S234ZB001A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP 5840 Instrument ID (2): _____

Lab Sample ID (1): 88-470 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1	15	35	Y	
02	Column 2				
03	Column 1				
04	Column 2				
05	Column 1				
06	Column 2				
07	Column 1				
08	Column 2				
09	Column 1				
10	Column 2				
11	Column 1				
12	Column 2				

Comments: _____

HRC 001 0717

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-235ZC001.41

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP 5840 Instrument ID (2): _____

Lab Sample ID (1): 88-471 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1	15	35	Y	
02	Column 2				
03	Column 1				
04	Column 2				
05	Column 1				
06	Column 2				
07	Column 1				
08	Column 2				
09	Column 1				
10	Column 2				
11	Column 1				
12	Column 2				

Comments: _____

HRC 001 0718

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-236 ZD001A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP 5840 Instrument ID (2): _____

Lab Sample ID (1): 88-472 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0719

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-237ZE001A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5841 Instrument ID (2): _____

Lab Sample ID (1): 88-473 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0720

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

5-238EECC241

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): OV-5 GC Column ID (2): _____

Instrument ID (1): HP 5840 Instrument ID (2): _____

Lab Sample ID (1): 88-476 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0721

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-239ZF06 1A1

Lab Name: Occidental Chemical Corp Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-474 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0722

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-240GG0021

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-475 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0723

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-241HHCC241

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-477 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1		15	35	Y	
02	Column 2					
03	Column 1					
04	Column 2					
05	Column 1					
06	Column 2					
07	Column 1					
08	Column 2					
09	Column 1					
10	Column 2					
11	Column 1					
12	Column 2					

Comments: _____

HRC 001 0724

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-242 JJCC241

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-478 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1		15	35	Y	
02	Column 2					
03	Column 1					
04	Column 2					
05	Column 1					
06	Column 2					
07	Column 1					
08	Column 2					
09	Column 1					
10	Column 2					
11	Column 1					
12	Column 2					

Comments: _____

HRC 001 0725

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-248 GGC3A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): SS-484 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1		15	35	Y	
02	Column 2					
03	Column 1					
04	Column 2					
05	Column 1					
06	Column 2					
07	Column 1					
08	Column 2					
09	Column 1					
10	Column 2					
11	Column 1					
12	Column 2					

Comments: _____

HRC 001 0726

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-249PP002A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-485 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0727

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-250000C2.A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP 5840 Instrument ID (2): _____

Lab Sample ID (1): 88-486 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0728

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-251Q2002A1

Lab Name: Occidental Chemical Corp Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-487 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1	15	35	Y	
02	Column 2				
03	Column 1				
04	Column 2				
05	Column 1				
06	Column 2				
07	Column 1				
08	Column 2				
09	Column 1				
10	Column 2				
11	Column 1				
12	Column 2				

Comments: _____

HRC 001 0729

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

271SU001A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1035

Sample wt/vol: 1.12 (g/mL) U Lab File ID: _____

Level: (low/med) Med Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/30/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/5/88

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

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	94.8	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0730

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

273SU003A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1037

Sample wt/vol: 1.25 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/30/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/5/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	49.7	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0731

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

275SUCC541

Lab Name: Occidental Chemical Corp Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1059

Sample wt/vol: 1.21 (g/mL) 10 Lab File ID: _____

Level: (low/med) Low Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 3/30/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/5/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	0.8	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0732

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Level: (low/med) Med

	EPA SAMPLE NO.	S1 (TCMX) #	OTHER
01	259SUCC1A1	77	
02	261SUCC2A1	79	
03	262SUCC4A1	108	
04	264SUCC6A1	91	
05	265SUCC1A1	74	
06	266SUCC2A1	87	
07	268SUCC4A1	111	
08	270SUCC6A1	95	
09	271SUCC1A1	95	
10	273SUCC3A1	105	
11	275SUCC5A1	107	
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

ADVISORY QC LIMITS (24-154)

S1 (TCMX) = Hexachlorobenzene

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

HRC 001 0733

FORM II PEST-2 10/86

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: Hp-5840 GC Column ID: DB-5

DATE(S) OF ANALYSIS FROM: 4/4/88 TO: 4/5/88		DATE OF ANALYSIS 4/4/88
TIME(S) OF ANALYSIS FROM: _____ TO: _____		TIME OF ANALYSIS 2011
		LAB SAMPLE ID (STANDARD) Aroclor

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC								
Heptaclor								
Aldrin								
Hept. Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endo.Sulfate								
4,4'-DDT								
Methoxychlor								
Endrin Ketone								
a. Chlordane								
g. Chlordane								
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248		15.0	35.0	539569			Y	
Aroclor-1254								
Aroclor-1260								

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

254SUCC1A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5341 Instrument ID (2): _____

Lab Sample ID (1): 88-1123 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	—
02	Column 2 _____			—	—
03	Column 1 _____			—	—
04	Column 2 _____			—	—
05	Column 1 _____			—	—
06	Column 2 _____			—	—
07	Column 1 _____			—	—
08	Column 2 _____			—	—
09	Column 1 _____			—	—
10	Column 2 _____			—	—
11	Column 1 _____			—	—
12	Column 2 _____			—	—

Comments: _____

HRC 001 0735

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

260SUCCRA1

Lab Name: Occidental Chemical Corp Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-1024 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1	1.5	.35		
02	Column 2				
03	Column 1				
04	Column 2				
05	Column 1				
06	Column 2				
07	Column 1				
08	Column 2				
09	Column 1				
10	Column 2				
11	Column 1				
12	Column 2				

Comments: _____

HRC 001 0736

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

262.5UCC4.41

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 85-1026 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1		.15	.35	Y	
02	Column 2					
03	Column 1					
04	Column 2					
05	Column 1					
06	Column 2					
07	Column 1					
08	Column 2					
09	Column 1					
10	Column 2					
11	Column 1					
12	Column 2					

Comments: _____

HRC 001 0737

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

264SUCC6A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 86-1028 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1		.15	.35	Y	
02	Column 2					
03	Column 1					
04	Column 2					
05	Column 1					
06	Column 2					
07	Column 1					
08	Column 2					
09	Column 1					
10	Column 2					
11	Column 1					
12	Column 2					

Comments: _____

HRC 001 0738

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

265 SUCC1A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-1029 Lab Sample ID (2): _____

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 Aroclor	Column 1		15	35	Y	
02	Column 2					
03	Column 1					
04	Column 2					
05	Column 1					
06	Column 2					
07	Column 1					
08	Column 2					
09	Column 1					
10	Column 2					
11	Column 1					
12	Column 2					

Comments: _____

HRC 001 0739

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

266 SLCC02A1

Lab Name: Occidental Chemical Corp Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-1030 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0740

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

2685U004A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-1132 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HPC 001 0741

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

27054006A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-1034 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0742

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

27154C01.41

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): Hp-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-1035 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0743

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

273SU0C3A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-1037 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0744

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

275 SLCC5A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5840 Instrument ID (2): _____

Lab Sample ID (1): 88-1039 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	15	35	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0745

OxyChem
Technology Center

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SPECIAL ENVIRONMENTAL

MEMO

To ~~A. F. Weston~~ **Date** April 29, 1988

From R. Cortellucci

Subject AROCLOR 1248 CONTENT OF THE SOILS FROM HICKSVILLE, NY

COPIES: R.G. Badger, P.T. Holt, W.E. Leroux, TIC

PROJECT PERSONNEL: W. Fenlon

SUMMARY

On March 24, 1988, eight (8) soil samples from Hicksville, NY were submitted for determination of their Aroclor 1248 content. Of those samples submitted, all eight sites had Aroclor 1248 concentrations less than 10 ppm.

INTRODUCTION

In order to determine the extent of contamination, soil samples from eight sites at Hicksville, New York were analyzed for their Aroclor 1248 content. These samples were analyzed using the EPA CLP methodology, making slight variations of the method where needed.

EXPERIMENTAL

Before the work-up, each sample was forced through a #8 sieve to separate the friable material from the non-friable material (U.S. Standard Testing Sieve, #8 mesh, A.S.T.E.-11 specifications, 2.36 mm opening). After sieving, the soils were tumbled for one hour to improve homogeneity (Rotary Tumbler, Model 33B, Lortone, Inc.). These samples were now ready for analysis. One gram of sample was transferred to a 50 mL beaker, sodium sulfate was stirred in until the sample had a sandy texture, 50 uL of 20 ppm hexachlorobenzene (C66) in acetone was added as an internal standard and 10.0 mL of hexane was then added as the extraction solvent. The sample was then extracted for two minutes using a sonic disrupter (Heat Systems, Ultrasonics, Inc.), after which time the extract was decanted to 5 mL Teflon-lined screw-top vial until analysis. Recovery experiments were performed in the same manner, with the addition of Aroclor 1248 occurring before the addition of hexane.

Determination of the moisture content of each sample was done by transferring approximately five grams (0.01 g accuracy) to a tarred aluminum pan and heating for two hours at 110°C. After cooling in a dessicator, the samples were re-weighed and the moisture content was determined.

RESULTS AND DISCUSSION

The results of this analysis can be found in Table I. The concentration of Aroclor 1248 is given in ug/g on a dry weight basis. Also given in Table I are the recoveries of the C66 surrogate, expressed as a percent of the original 1.0 ug added. Because it was not required by the CLP this figure has not been corrected for percent moisture.

Table II contains the results of two duplicate analysis. Sites 244 and 267 were chosen for duplicate analysis. After weighing out two portions for duplicate analysis, a third portion was weighed out for spiking purposes. Site 267 was spiked with 1 ug/g Aroclor 1248 and site 244 was spiked with 20 ug/g of Aroclor 1248. This data is found in Table III. Table IV contains the moisture content of each soil. Percent moisture was determined by:

$$\frac{\text{grams wet weight - grams dry weight}}{\text{grams wet weight}} \times 100$$

Remi Cortellucci
Chemist
Central Sciences

/jb
Attachments

TABLE I

Concentration of Aroclor 1248
Hicksville, NY

ug/g Dry Weight Basis

Sample I.D.	OCC Log #	Aroclor 1248	% C66 Recovery
S243ZG001A1	88-479	5.4	132
S244ZH001A1	88-480	4.9*	102
S245ZI001A1	88-481	2.6	136
S246ZJ001A1	88-482	1.9	118
S247ZK001A1	88-483	5.1	133
263SU005A0	88-1027	0.1	127
267SU003A0	88-1031	1.1*	77
274SU004A0	88-1038	5.2	137

*Represents the average of duplicate results

TABLE II

Results of Duplicate Analysis

ug/g Dry Weight Basis

Sample I.D.	Experiment 1	Experiment 2
S244AH001A1	4.8	5.0
267SU003A0	1.4	0.8

TABLE III

Results of Spiking Experiments

ug/g Dry Weight Basis

Sample I.D.	Analysis	Added	Expected	Found	Recovered	(%)
S244AH001A1	4.9	2.1	7.0	6.9	2.0	95
267SU003A0	1.1	1.1	2.2	1.6	0.5	45

TABLE IV

Moisture Content
Soils from Hicksville, NY

Sample I.D.	% Moisture
S243AG001A1	11.04
S244ZH001A1	7.99
S245AI001A1	9.84
S246ZJ001A1	7.68
S247ZK001A1	9.35
263SU005A0	9.01
267SU003A0	7.08
274SU004A0	14.63

FRC 001 0750

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-243ZGCC1.71

Lab Name: Occidental Chemical Corp Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-479

Sample wt/vol: 0.96 (g/mL) 10 Lab File ID: _____

Level: (low/med) Low Date Received: 2/19/88

% Moisture: not dec. _____ dec. X Date Extracted: 4/20/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/20/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	5.4	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0751

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-2442H001A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-480

Sample wt/vol: 0.94 (g/mL) G Lab File ID: _____

Level: (low/med) Low Date Received: 2/19/88

% Moisture: not dec. _____ dec. X Date Extracted: 4/26/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/27/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	4.9	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0752

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-245ZICC1.41

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-481

Sample wt/vol: 0.91 (g/mL) 10 Lab File ID: _____

Level: (low/med) Low Date Received: 2/19/88

% Moisture: not dec. _____ dec. X Date Extracted: 4/20/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/21/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	2.6	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0753

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-246ZJC01A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-482

Sample wt/vol: 0.93 (g/mL) G Lab File ID: _____

Level: (low/med) Low Date Received: 2/19/88

% Moisture: not dec. _____ dec. X Date Extracted: 4/20/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/22/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	1.9	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0754

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-247ZKC01A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-483

Sample wt/vol: 0.92 (g/mL) LC Lab File ID: _____

Level: (low/med) Low Date Received: 2/19/88

% Moisture: not dec. _____ dec. X Date Extracted: 4/20/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/21/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	5.1	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0755

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

263SUCC5AC

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1027

Sample wt/vol: 0.93 (g/mL) 1C Lab File ID: _____

Level: (low/med) Low Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 4/20/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/22/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	6.1	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0756

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

267SU003AC

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1031

Sample wt/vol: 0.95 (g/mL) LC Lab File ID: _____

Level: (low/med) Low Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 4/20/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/25/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	1.1	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0757

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

274SLCC4AC

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 88-1038

Sample wt/vol: 0.87 (g/mL) L Lab File ID: _____

Level: (low/med) Low Date Received: 3/24/88

% Moisture: not dec. _____ dec. X Date Extracted: 4/20/88

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4/21/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC(Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-22-9	Aroclor-1242		
12672-29-6	Aroclor-1248	5.2	
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

HRC 001 0758

2F
SOIL PESTICIDE SURROGATE RECOVERY

ab Name: Occidental Chemical Corp. Contract: _____

.b Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

evel: (low/med) Med

	EPA SAMPLE NO.	S1 (C66) #	OTHER
01	S243ZGC01A1	132	
02	S244ZHC01A1	102	
03	S245ZIC01A1	136	
04	S246ZJC01A1	118	
05	S247ZKC01A1	133	
06	263S4CC5AC	127	
07	267S4CC5AC	77	
08	274S4CC4AC	137	
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

ADVISORY QC LIMITS (24-154)

S1 (C66) = Hexachlorobenzene

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

HRC 001 0759

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: Hp 5890 GC Column ID: DB-5

DATE(S) OF ANALYSIS	FROM: 4/20/88 TO: 4/21/88	DATE OF ANALYSIS	4/20/88
TIME(S) OF ANALYSIS	FROM: _____ TO: _____	TIME OF ANALYSIS	1911
		LAB SAMPLE ID (STANDARD)	Aroclor

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC								
Heptaclor								
Aldrin								
Hept. Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endo.Sulfate								
4,4'-DDT								
Methoxychlor								
Endrin Ketone								
a. Chlordane								
g. Chlordane								
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248		11.44	29.26	21463			Y	
Aroclor-1254								
Aroclor-1260								

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-2437G001A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): Hp-5890 Instrument ID (2): _____

Lab Sample ID (1): 88-479 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	11.44	29.26	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0761

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S244ZACC1A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5890 Instrument ID (2): _____

Lab Sample ID (1): 88-480 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	11.44	29.26	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0762

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S245ZICC1A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5890 Instrument ID (2): _____

Lab Sample ID (1): 88-481 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	11.44	29.26	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0763

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-246ZJ001A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5890 Instrument ID (2): _____

Lab Sample ID (1): 88-482 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	11.44	29.26	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0764

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S-2472K001A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5890 Instrument ID (2): _____

Lab Sample ID (1): 88-483 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	11.44	29.26	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0765

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

263SUCC5AC

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5896 Instrument ID (2): _____

Lab Sample ID (1): 88-1027 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	11.44	29.26	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0766

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

267S4003A0

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5890 Instrument ID (2): _____

Lab Sample ID (1): 88-1031 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	11.44	29.26	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0767

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

2745UCC4AC

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP-5890 Instrument ID (2): _____

Lab Sample ID (1): 88-1038 Lab Sample ID (2): _____

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 Aroclor 1248	Column 1 _____	11.44	29.26	Y	_
02	Column 2 _____	_____	_____	_	_
03 _____	Column 1 _____	_____	_____	_	_
04	Column 2 _____	_____	_____	_	_
05 _____	Column 1 _____	_____	_____	_	_
06	Column 2 _____	_____	_____	_	_
07 _____	Column 1 _____	_____	_____	_	_
08	Column 2 _____	_____	_____	_	_
09 _____	Column 1 _____	_____	_____	_	_
10	Column 2 _____	_____	_____	_	_
11 _____	Column 1 _____	_____	_____	_	_
12	Column 2 _____	_____	_____	_	_

Comments: _____

HRC 001 0768