L1358070001 Montgomery Co.
Eagle Zinc Company
ILD 980606941
SF/HRS
Volume 2 of 2

C2
1/17/96
156083

CERCLA

Expanded Site Inspection Analytical Results

Illinois Environmental Protection Agency
P. O. Box 19276
Springfield, IL 62794-9276

Confidential Material May be Enclosed

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APPENDIX J

ANALYTICAL RESULTS OF OCTOBER 26-27,1993

EXPANDED SITE INSPECTION SAMPLES

ANALYZED FOR TARGET COMPOUND LIST PARAMETERS

DATA QUALIFIERS

QUALIFIER	DEFINITION ORGANICS	DEFINITION INORGANICS
U	Compound was tested for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by two, to account for the fact that only half of the extract is recovered.	Analyte was analyzed for but not detected.
J	Estimated value. Used when estimating a concentration for tentatively identified compounds (TICS) where a 1:1 response is assumed or when the mass spectral data indicate the presence of a compound that meets the identification criteria and the result is less than the sample quantitation limit but greater than zero. Used in data validation when the quality control data indicate that a value may not be accurate.	Estimated value. Used in data validation when the quality control data indicate that a value may not be accurate.
C	This flag applies to pesticide results where the identification is confirmed by GC/MS.	Method qualifier indicates analysis by the Manual Spectrophotometric method.
B	Analyte was found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	The reported value is less than the CRDL but greater than the instrument detection limit (IDL).
D	Identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor as in the "E" flag, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and <u>all</u> concentration values are flagged with the "D" flag.	Not used.
E	Identifies compounds whose concentrations exceed the calibration range for that specific analysis. All extracts containing compounds exceeding the calibration range must be diluted and analyzed again. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses must be reported on separate Forms I. The Form I for the diluted sample must have the "DL" suffix appended to the sample number.	The reported value is estimated because of the presence of interference.
A	This flag indicates that a TIC is a suspected aldol concentration product formed by the reaction of the solvents used to process the sample in the laboratory.	Method qualifier indicates analysis by Flame Atomic Absorption (AA).
M	Not used.	Duplicate injection (a QC parameter not met).

N	Not used	Spiked sample (a QC parameter not met).
S	Not used.	The reported value was determined by the Method of Standard Additions (MSA).
W	Not used.	Post digestion spike for Furnace AA analysis (a QC parameter) is out of control limits of 85% to 115% recovery, while sample absorbance is less than 50% of spike absorbance.
*	Not used.	Duplicate analysis (a QC parameter not within control limits).
+	Not used.	Correlation coefficient for MSA (a QC parameter) is less than 0.995.
P	Not used.	Method qualifier indicates analysis by ICP (Inductively Coupled Plasma) Spectroscopy.
CV	Not used.	Method qualifier indicates analysis by Cold Vapor AA.
AV	Not used.	Method qualifier indicates analysis by Automated Cold Vapor AA.
AS	Not used.	Method qualifier indicates analysis by Semi-Automated Cold Spectrophotometry.
T	Not used.	Method qualifier indicates Titrimetric analysis.
NR	The analyte was not required to be analyzed.	The analyte was not required to be analyzed.
R	Rejected data. The QC parameters indicate that the data is not usable for any purpose.	Rejected data. The QC parameters indicate that the data is not usable for any purpose.

SITE NAME: EAGLE ZINC COMPANY

ILD 980606941

TABLE 3-2
SEDIMENT SUMMARY

SAMPLING POINT / PARAMETER	X201 Backgd. Sediment	X202 Dup of X201 Sediment	X203 Sediment	X204 Sediment	X205 Sediment	X206 Sediment	X207 Sediment	X208 Sediment
VOLATILES UG\KG								
Methylene Chloride	--	--	--	--	--	160.0 J	--	--
Acetone	11.0 J	22.0	12.0 J	22.0 UJ	37.0 J	78.0 J		17.0 UJ
2-Butanone (MEK)	14.0 UJ	4.0 J	6.0 J	22.0 UJ	20.0 J	48.0 J	14.0 UJ	17.0 UJ
1,1,1-Trichloroethane	--	--	17.0 UJ	27.0 J	9.0 J	290.0 J	--	8.0 J
Carbon Tetrachloride	--	--	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
Bromodichloromethane	--	--	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
1,2-Dichloropropane	--	--	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ		17.0 UJ
cis-1,3-Dichloropropene	--	--	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
Trichloroethene	--	--	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
Dibromochloromethane	--	--	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
1,1,2-Trichloroethane	--	--	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
Benzene	--	--	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
Trans-1,3-Dichloropropene	--	--	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
Bromoform	--	--	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
4-Methyl-2-Pentanone	--	--	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
2-Hexanone	14.0 UJ	14.0 UJ	17.0 UJ	22.0 UJ	14.0 UJ	36.0 UJ	14.0 UJ	17.0 UJ
Tetrachloroethene	--	--	--	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
Toluene	--	--	--	22.0 UJ	14.0 UJ	36.0 J	--	17.0 UJ
1,1,2,2-Tetrachloroethane	--	--	--	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
Chlorobenzene	--	--	--	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
Ethylbenzene	--	--	--	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
Styrene	--	--	--	22.0 UJ	14.0 UJ	36.0 UJ		17.0 UJ
Xylene(total)	--	--	--	22.0 UJ	14.0 UJ	36.0 UJ	--	17.0 UJ
SEMIVOLATILES UG\KG								
4-Chloroaniline	470.0 UJ	470.0 UJ	560.0 UJ	730.0 UJ	480.0 UJ	1200.0 UJ	440.0 UJ	560.0 UJ
2-Methylnaphthalene	--	--	--	--	100.0 J	--	--	--
3-Nitroaniline	1100.0 UJ	1100.0 UJ	1400.0 UJ	1800.0 UJ	1200.0 UJ	2800.0 UJ	1100.0 UJ	1400.0 UJ
4-Nitroaniline	1100.0 R	1100.0 R	1400.0 R	1800.0 R	1200.0 R	2800.0 R	1100.0 R	1400.0 R
Phenanthrene	--	--	280.0 J	1900.0	--	--	--	--
Anthracene	--	--	--	320.0 J	--	--	--	--
Carbazole				290.0 J				
Fluoranthene	--	--	520.0 J	1700.0	--	--	130.0 J	--
Pyrene	--	--	520.0 J	1600.0	--	--	140.0 J	--
3,3'-Dichlorobenzidine	470.0 UJ	470.0 UJ	560.0 UJ	730.0 UJ	480.0 UJ	1200.0 UJ	440.0 UJ	560.0 UJ
Benzo(a)anthracene	--	--	230.0 J	850.0	--	--	100.0 J	--
Chrysene	--	--	310.0 J	670.0 J	--	--	120.0 J	--
bis(2-Ethylhexyl)phthalate	--	--	660.0	--	--	--	--	--
Benzo(b)fluoranthene	--	--	480.0 J	--	--	--	140.0 J	--
Benzo(k)fluoranthene	--	--	--	1200.0	--	--	--	--
Benzo(a)pyrene	--	--	230.0 J	810.0	--	--	--	--

SITE NAME: EAGLE ZINC COMPANY

ILD 980606941

TABLE 3-2
SEDIMENT SUMMARY

SAMPLING POINT / PARAMETER	X201 Backgd. Sediment	X202 Dup of X201 Sediment	X203 Sediment	X204 Sediment	X205 Sediment	X206 Sediment	X207 Sediment	X208 Sediment
PESTICIDES UG\KG								
alpha-BHC	--	--	--	--	--	1.5 J	--	--
beta-BHC	--	--	--	--	--	1.0 JP	--	--
gamma-BHC (Lindane)	--	--	--	--	--	1.1 JP	--	--
Aldrin	--	--	4.4 P	--	--	--	--	--
Heptachlor epoxide	--	0.2 JP	--	1.3 JP	--	4.7 J	--	--
Dieldrin	2.3 J	2.6 J	16.0 P	12.0 P		10.0 J	--	1.3 JP
4,4'-DDE	--	0.4 JP	--	--	--	0.7 JP	--	--
Endrin	0.3 JP	0.9 J	18.0 P	12.0	2.4 J	--	--	2.8 JP
Endosulfan II	--	--	--	--	--	--	--	3.6 JP
4,4'-DDD	0.4 JP	0.9 JP	7.5 P	6.0 JP	--	1.8 JP	--	5.1 J
4,4'-DDT	3.7 J	0.4 J	11.0 P	15.0 P		4.8 J	--	--
Methoxychlor (Mariate)	--	--	--	--	--	13.0 J	--	--
Endrin Ketone	--	0.5 J	--	--	1.6 J	--	--	--
alpha-Chlorodane	2.0 JP	3.1 P	16.0 P	7.0 P	--	1.7 JP	--	0.6 J
gamma-Chlorodane	2.0 J	2.5	15.0 P	7.4 P	--	3.0 J	--	0.7 JP
Toxaphene	--	110.0 JP	--	--	--	--	--	320.0 P
Aroclor-1254	--	--	250.0	120.0	--	--	--	24.0 JP
Aroclor-1260	17.0 J	9.3 J	110.0 P	100.0	--	--	--	--
INORGANICS MG\KG								
Aluminum	6830.0	6390.0	7370.0	14900.0	8360.0	16300.0	10700.0	9810.0
Antimony	9.0 J	10.4 J	10.3 J	17.4 J	9.3 J	62.7 J	10.7 J	10.8 J
Arsenic	4.5	4.3	6.4	10.9	2.9	19.4	6.0	6.0
Barium	79.5	70.4	99.9	97.4	89.6	383.0	167.0	92.5
Beryllium	0.4 B	0.4 B	0.5 B	0.6 B	0.5 B	1.5 B	0.7 B	0.6 B
Cadmium	0.7 B	--	8.6	7.4	1.8	523.0	11.1	19.6
Calcium	6360.0	5520.0	20300.0	12000.0	4680.0	8260.0	1510.0	3020.0
Chromium	9.9	9.9	12.1	13.2	11.0	28.6	14.6	13.7
Cobalt	6.1 B	4.9 B	6.0 B	8.1 B	4.5 B	353.0	10.8 B	4.7
Copper	11.9	11.2	37.9	41.9	9.0	1420.0	20.8	52.2
Iron	10100.0	9120.0	12400.0	14300.0	10900.0	82400.0	14900.0	14500.0
Lead	46.4	35.0	101.0	72.6	10.2	932.0	76.0	125.0
Magnesium	2760.0	2390.0	3330.0	2960.0	2620.0	4970.0	1500.0	1930.0
Manganese	501.0	384.0	722.0	451.0	85.9	3500.0	1470.0	461.0
Mercury	--	--	0.2	0.1 B	--	0.7	--	0.3
Nickel	9.2 B	8.7 B	11.5	14.7 B	12.6	583.0	11.9	12.7
Selenium	0.3 J	0.3 J	0.3 J	0.4 J	0.3 J	4.1	0.3 J	0.4 J
Silver	0.2	--	--	--	--	14.1	--	--
Sodium	73.3 B	79.8 B	132.0 B	150.0 B	84.7 B	470.0 B	82.0 B	110.0 B
Thallium	0.3 J	--	--	0.4 J	0.3 J	3.8 J	0.3 J	0.4 J
Vanadium	17.9	17.4	19.0	26.3	20.8	52.9	41.2	27.2
Zinc	326.0	291.0	2200.0	3040.0	5690.0	156000.0	2410.0	3280.0

SITE NAME: EAGLE ZINC CO.

ILD 980606941

TABLE 3-2
SOIL SUMMARY

SAMPLING POINT PARAMETER	X101 Backgd. Soil	X102 Dup of X101 Soil	X103 Soil	X104 Soil	X105 Soil	X106 Soil
INORGANICS MG\KG (ppm)						
Aluminum	12400.00	10000.00	14900.00	6880.00	7430.00	13000.00
Antimony	8.90 J	9.20 J	13.90 J	10.60 J	11.40 J	9.40 J
Arsenic	5.80	5.70	5.00	6.60	86.30	6.20
Barium	230.00	265.00	112.00	181.00	379.00	224.00
Beryllium	0.80 B	0.81 B	0.68 B	0.49 B	0.83 B	0.63 B
Cadmium	--	--	3.20	3.20	47.20	0.89 B
Calcium	10600.00	9880.00	2010.00	598.00 B	1930.00	11600.00
Chromium	16.20	14.40	15.90	10.30	22.60	15.10
Cobalt	4.10 B	6.50 B	12.00 B	13.70	20.10	11.10
Copper	20.00 J	19.70 J	201.00 J	30.60 J	911.00 J	24.70 J
Iron	14700.00	14400.00	13900.00	11500.00	104000.00	15400.00
Lead	148.00	236.00	260.00	61.00	5760.00	28.50
Magnesium	2370.00	2090.00	1970.00	1040.00 B	1630.00	2150.00
Manganese	434.00	686.00	915.00	1180.00	178.00	922.00
Mercury	0.17	0.18	--	--	--	--
Nickel	13.50	11.50	20.00	27.10	55.90	14.00
Potassium	1890.00	1600.00	1120.00 B	491.00 J	300.00 J	1060.00 J
Selenium	--	1.30 J	0.31 J	0.27 J	1.30	--
Silver	--	--	--	--	6.30	--
Sodium	106.00 B	87.90 B	47.80 B	47.50 B	39.60 B	37.40 B
Thallium	0.33 B	0.34 J	0.31 J	1.20 J	1.30 J	0.26 J
Vanadium	28.50	27.10	28.20	27.50	22.60	28.50
Zinc	136.00	138.00	5580.00	4770.00	31700.00	1490.00

SITE NAME: EAGLE ZINC CO.

ILD 980606941

TABLE 3-2
SOIL SUMMARY

SAMPLING POINT	X107	X108	X109	X110	X111	X112
PARAMETER	Soil	Soil	Soil	Soil	Soil	Soil
INORGANICS MG\KG (ppm)						
Aluminum	13000.00	11500.00	10200.00	15000.00	13500.00	9950.00
Antimony	10.50 J	13.00 J	9.30 J	7.90 J	9.00 J	10.20 J
Arsenic	8.70	13.40	4.60	13.60	8.50	6.20
Barium	124.00	267.00	130.00	150.00	193.00	233.00
Beryllium	0.72 B	1.00 B	0.60 B	0.78 B	0.94 B	0.85 B
Cadmium	3.50	11.30	0.71 B	2.00	1.60	2.80
Calcium	5360.00	5430.00	2580.00	3450.00	8380.00	2800.00
Chromium	16.10	23.40	13.40	20.70	20.20	14.80
Cobalt	5.60 B	14.80	6.90 B	8.50 B	7.80 B	11.30 B
Copper	36.40 J	104.00	15.30	22.50	33.80	15.90
Iron	14900.00	33900.00	12600.00	20700.00	19600.00	13900.00
Lead	105.00	388.00	47.00	87.60	70.80	70.10
Magnesium	2090.00	1630.00	1530.00	2500.00	1950.00	1760.00
Manganese	600.00	1670.00	660.00	563.00	491.00	2070.00
Mercury	0.16	0.16	0.11 B	--	0.11 B	0.11 B
Nickel	15.90	35.10	11.00	15.90	16.50	22.90
Potassium	1160.00 J	--	1650.00	1980.00	1920.00	1970.00
Selenium	--	0.84 J	0.31 J	0.49 J	0.42 J	0.39 J
Silver	--	--	--	--	--	--
Sodium	71.80 B	178.00 B	65.70 B	62.80 B	120.00 B	52.40 B
Thallium	0.35 J	1.40 J	0.28 J	--	0.25 J	0.28 J
Vanadium	27.30	37.70	24.70	38.70	34.20	28.20
Zinc	2480.00	2280.00	360.00	606.00	488.00	489.00

SITE NAME: EAGLE ZINC CO.

ILD 980606941

TABLE 3-2
SOIL SUMMARY

SAMPLING POINT	X113	X114	X115	X116	X117
PARAMETER	Soil	Soil	Soil	Soil	Soil
INORGANICS MG\KG (ppm)					
Aluminum	16600.00	9750.00	14800.00	12500.00	13800.00
Antimony	7.80 J	8.40 J	11.10 J	9.90 J	14.50 J
Arsenic	5.60	11.90	10.50	7.10	8.50
Barium	116.00	183.00	181.00	227.00	222.00
Beryllium	0.85 B	1.00	0.80 B	0.93 B	1.70
Cadmium	0.68 B	2.90	1.48	2.30	4.80
Calcium	5940.00	4230.00	4970.00	8430.00	19300.00
Chromium	21.70	15.90	19.40	18.90	17.30
Cobalt	10.60	5.80 B	7.00 B	9.80 B	10.60 B
Copper	22.50	28.30 J	27.80 J	25.50 J	57.20 J
Iron	20400.00	28600.00	19700.00	18900.00	21100.00
Lead	75.10	137.00	76.20	147.00	186.00
Magnesium	4870.00	1130.00	2030.00	2020.00	2140.00
Manganese	568.00	314.00	538.00	851.00	995.00
Mercury	--	--	0.42	0.24	0.14 B
Nickel	18.60	14.40	10.90	16.50	27.50
Potassium	2400.00	1040.00	1470.00	1750.00	1460.00 J
Selenium	0.27 J	0.76 J	0.52 J	0.53 J	0.35 J
Silver	--	--	1.20	--	--
Sodium	45.80	293.00 B	61.50 B	89.90 B	1020.00 B
Thallium	0.27 J	0.71 J	0.57 J	0.53 J	0.35 J
Vanadium	33.70	29.70	34.80	35.10	34.30
Zinc	451.00	1580.00	638.00	998.00	7420.00

SITE NAME: EAGLE ZINC CO.

ILD 980606941

SOIL

TABLE 3-2
SUMMARY

SAMPLING POINT	X118	X119	X120
PARAMETER	Soil	Soil	Soil
INORGANICS MG\KG (ppm)			
Aluminum	14100.00	9390.00	16300.00
Antimony	10.90 J	8.30 J	8.00 J
Arsenic	5.90	6.70	10.70
Barium	106.00	196.00	155.00
Beryllium	0.73 B	0.60 B	0.95
Cadmium	--	2.80	--
Calcium	1720.00	12100.00	2870.00
Chromium	18.50	13.70	20.40
Cobalt	11.10 B	14.90	7.40 B
Copper	15.90 J	17.50 J	17.20 J
Iron	18200.00	14100.00	22900.00
Lead	30.40	51.90	32.70
Magnesium	2120.00	1790.00	2870.00
Manganese	795.00	1520.00	889.00
Mercury	--	0.32	--
Nickel	12.80	14.80	16.90
Potassium	1210.00 J	1670.00	1490.00
Selenium	0.27 J	0.55 J	0.38 J
Silver	--	--	--
Sodium	--	--	27.70 B
Thallium	0.27 J	0.50 J	0.25 J
Vanadium	34.50 B	26.70	39.00
Zinc	354.00	1570.00	371.00

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X201

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344846

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1029BK04

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 30 Date Analyzed: 10/29/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	14 ~~8~~	~~B~~U am
67-64-1	Acetone	11	J
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	UJ
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	UJ
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	14	U

RECEIVED
DEC 30 1993
IEPA/DLPC

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X201

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344846

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1029BK04

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 30 Date Analyzed: 10/29/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X201

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344846

Sample wt/vol: 30.50 (g/mL) G Lab File ID: B1102E09

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 31 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	470	U
111-44-4	bis(2-Chloroethyl)Ether	470	U
95-57-8	2-Chlorophenol	470	U
541-73-1	1,3-Dichlorobenzene	470	U
106-46-7	1,4-Dichlorobenzene	470	U
95-50-1	1,2-Dichlorobenzene	470	U
95-48-7	2-Methylphenol	470	U
108-60-1	2,2'-oxybis(1-Chloropropane)	470	U
106-44-5	4-Methylphenol	470	U
621-64-7	N-Nitroso-Di-n-Propylamine	470	U
67-72-1	Hexachloroethane	470	U
98-95-3	Nitrobenzene	470	U
78-59-1	Isophorone	470	U
88-75-5	2-Nitrophenol	470	U
105-67-9	2,4-Dimethylphenol	470	U
111-91-1	bis(2-Chloroethoxy)Methane	470	U
120-83-2	2,4-Dichlorophenol	470	U
120-82-1	1,2,4-Trichlorobenzene	470	U
91-20-3	Naphthalene	470	U
106-47-8	4-Chloroaniline	470	UJ
87-68-3	Hexachlorobutadiene	470	U
59-50-7	4-Chloro-3-Methylphenol	470	U
91-57-6	2-Methylnaphthalene	470	U
77-47-4	Hexachlorocyclopentadiene	470	U
88-06-2	2,4,6-Trichlorophenol	470	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	470	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	470	U
208-96-8	Acenaphthylene	470	U
606-20-2	2,6-Dinitrotoluene	470	U
99-09-2	3-Nitroaniline	1100	UJ
83-32-9	Acenaphthene	470	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X201

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344846

Sample wt/vol: 30.50 (g/mL) G Lab File ID: B1102E09

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 31 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1100	U	
100-02-7	4-Nitrophenol	1100	U	
132-64-9	Dibenzofuran	470	U	
121-14-2	2,4-Dinitrotoluene	470	U	
84-66-2	Diethylphthalate	470	U	
7005-72-3	4-Chlorophenyl-phenylether	470	U	
86-73-7	Fluorene	470	U	
100-10-6	4-Nitroaniline	1100	~~U~~ R	am
534-52-1	4,6-Dinitro-2-methylphenol	1100	U	
86-30-6	N-Nitrosodiphenylamine (1)	470	U	
101-55-3	4-Bromophenyl-phenylether	470	U	
118-74-1	Hexachlorobenzene	470	U	
87-86-5	Pentachlorophenol	1100	U	
85-01-8	Phenanthrene	470	U	
120-12-7	Anthracene	470	U	
86-74-8	Carbazole	470	U	
84-74-2	Di-n-Butylphthalate	800	~~B~~ U	am
206-44-0	Fluoranthene	470	U	
129-00-0	Pyrene	470	U	
85-68-7	Butylbenzylphthalate	470	U	
91-94-1	3,3'-Dichlorobenzidine	470	UJ	
56-55-3	Benzo(a)Anthracene	470	U	
218-01-9	Chrysene	470	U	
117-81-7	bis(2-Ethylhexyl)Phthalate	470	U	
117-84-0	Di-n-Octyl Phthalate	470	U	
205-99-2	Benzo(b)Fluoranthene	470	U	
207-08-9	Benzo(k)Fluoranthene	470	U	
50-32-8	Benzo(a)Pyrene	470	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	470	U	
53-70-3	Dibenz(a,h)Anthracene	470	U	
191-24-2	Benzo(g,h,i)Perylene	470	U	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X201

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344846

Sample wt/vol: 30.50 (g/mL) G Lab File ID: B1102E09

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 31 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs found: 27

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	UNKNOWN	10.17	1600	~~BJ~~ U	am
2.	UNKNOWN	10.88	650	~~BJ~~ U	am
3.	UNKNOWN	13.13	620	J	
4.	UNKNOWN ALIP. ACID	22.35	400	~~BJ~~ U	am
5.	UNKNOWN	25.50	130	J	
6.	UNKNOWN ALIP. ACID	26.83	320	J	
7.	UNKNOWN	28.43	260	J	
8.	UNKNOWN	28.68	430	J	
9.	UNKNOWN	32.30	220	J	
10.	UNKNOWN	32.50	1100	J	
11.	UNKNOWN	32.77	120	J	
12.	UNKNOWN	32.83	280	J	
13.	UNKNOWN	33.78	120	J	
14.	UNKNOWN ALIP. HYDROCARBON	34.38	1900	J	
15.	UNKNOWN	34.40	440	J	
16.	UNKNOWN	34.68	570	J	
17.	UNKNOWN	35.47	360	J	
18.	UNKNOWN	36.03	960	J	
19.	UNKNOWN ALIP. HYDROCARBON	36.63	1100	J	
20.	UNKNOWN ALIP. HYDROCARBON	36.78	5300	J	
21.	UNKNOWN ALIP. HYDROCARBON	36.93	970	J	
22.	UNKNOWN	38.93	230	J	
23.	UNKNOWN	39.17	710	J	
24.	UNKNOWN ALIP. HYDROCARBON	40.20	4700	J	
25.	UNKNOWN	42.03	1200	J	
26.	UNKNOWN	45.72	700	J	
27.	UNKNOWN	47.48	560	J	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X201

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344846

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 30 decanted: (Y/N) N Date Received: 10/27/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/28/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/04/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4 ~~0.49~~	~~BJP~~ U am
1024-57-3	Heptachlor epoxide	2.4	U
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	2.3	J
72-55-9	4,4'-DDE	4.7	U
72-20-8	Endrin	0.32	JP
33213-65-9	Endosulfan II	4.7	U
50-29-3	4,4'-DDD	0.37	JP
1031-07-8	Endosulfan sulfate	4.7	U
50-29-3	4,4'-DDT	3.7	J
72-43-5	Methoxychlor	24	U
53494-70-5	Endrin ketone	4.7	U
7421-36-3	Endrin aldehyde	4.7	U
5103-71-9	alpha-Chlordane	2.0	JP
5103-74-2	gamma-Chlordane	2.0	J
8001-35-2	Toxaphene	240	U
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	95	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	17	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X202

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344847

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1029BK05

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 30 Date Analyzed: 10/29/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	14	~~BJ~~ U am
67-64-1	Acetone	22	
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	4	J
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	UJ
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	14	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X202

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344847

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1029BK05

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 30 Date Analyzed: 10/29/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X202

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344847

Sample wt/vol: 30.10 (g/mL) G Lab File ID: B1102E08

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 30 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	470	U
111-44-4	bis(2-Chloroethyl)Ether	470	U
95-57-8	2-Chlorophenol	470	U
541-73-1	1,3-Dichlorobenzene	470	U
106-46-7	1,4-Dichlorobenzene	470	U
95-50-1	1,2-Dichlorobenzene	470	U
95-48-7	2-Methylphenol	470	U
108-60-1	2,2'-oxybis(1-Chloropropane)	470	U
106-44-5	4-Methylphenol	470	U
621-64-7	N-Nitroso-Di-n-Propylamine	470	U
67-72-1	Hexachloroethane	470	U
98-95-3	Nitrobenzene	470	U
78-59-1	Isophorone	470	U
88-75-5	2-Nitrophenol	470	U
105-67-9	2,4-Dimethylphenol	470	U
111-91-1	bis(2-Chloroethoxy)Methane	470	U
120-83-2	2,4-Dichlorophenol	470	U
120-82-1	1,2,4-Trichlorobenzene	470	U
91-20-3	Naphthalene	470	U
106-47-8	4-Chloroaniline	470	UJ
87-68-3	Hexachlorobutadiene	470	U
59-50-7	4-Chloro-3-Methylphenol	470	U
91-57-6	2-Methylnaphthalene	470	U
77-47-4	Hexachlorocyclopentadiene	470	U
88-06-2	2,4,6-Trichlorophenol	470	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	470	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	470	U
208-96-8	Acenaphthylene	470	U
606-20-2	2,6-Dinitrotoluene	470	U
99-09-2	3-Nitroaniline	1100	UJ
83-32-9	Acenaphthene	470	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X202

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344847

Sample wt/vol: 30.10 (g/mL) G Lab File ID: B1102E08

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 30 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1100	U	
100-02-7	4-Nitrophenol	1100	U	
132-64-9	Dibenzofuran	470	U	
121-14-2	2,4-Dinitrotoluene	470	U	
84-66-2	Diethylphthalate	470	U	
7005-72-3	4-Chlorophenyl-phenylether	470	U	
86-73-7	Fluorene	470	U	
100-10-6	4-Nitroaniline	1100	~~U~~R	am
534-52-1	4,6-Dinitro-2-methylphenol	1100	U	
86-30-6	N-Nitrosodiphenylamine (1)	470	U	
101-55-3	4-Bromophenyl-phenylether	470	U	
118-74-1	Hexachlorobenzene	470	U	
87-86-5	Pentachlorophenol	1100	U	
85-01-8	Phenanthrene	470	U	
120-12-7	Anthracene	470	U	
86-74-8	Carbazole	470	U	
84-74-2	Di-n-Butylphthalate	870	~~B~~U	am
206-44-0	Fluoranthene	470	U	
129-00-0	Pyrene	470	U	
85-68-7	Butylbenzylphthalate	470	U	
91-94-1	3,3'-Dichlorobenzidine	470	UJ	
56-55-3	Benzo(a)Anthracene	470	U	
218-01-9	Chrysene	470	U	
117-81-7	bis(2-Ethylhexyl)Phthalate	470	U	
117-84-0	Di-n-Octyl Phthalate	470	U	
205-99-2	Benzo(b)Fluoranthene	470	U	
207-08-9	Benzo(k)Fluoranthene	470	U	
50-32-8	Benzo(a)Pyrene	470	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	470	U	
53-70-3	Dibenz(a,h)Anthracene	470	U	
191-24-2	Benzo(g,h,i)Perylene	470	U	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X202

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344847

Sample wt/vol: 30.10 (g/mL) G Lab File ID: B1102E08

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 30 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs found: 25

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.18	1600	~~BJ~~ U am
2.	UNKNOWN	10.90	630	~~BJ~~ U am
3.	UNKNOWN	13.15	630	J
4.	UNKNOWN ALIP. ACID	22.37	460	~~BJ~~ U am
5.	UNKNOWN	25.52	180	J
6.	UNKNOWN ALIP. ACID	26.85	240	J
7.	UNKNOWN	28.70	190	J
8.	UNKNOWN	31.53	210	J
9.	UNKNOWN	32.32	200	J
10.	UNKNOWN	32.50	1200	J
11.	UNKNOWN	33.80	130	J
12.	UNKNOWN ALIP. HYDROCARBON	34.40	1800	J
13.	UNKNOWN	34.42	510	J
14.	UNKNOWN	34.47	400	J
15.	UNKNOWN	34.70	370	J
16.	UNKNOWN	35.48	300	J
17.	UNKNOWN	36.03	890	J
18.	UNKNOWN ALIP. HYDROCARBON	36.65	720	J
19.	UNKNOWN ALIP. HYDROCARBON	36.80	4800	J
20.	UNKNOWN	36.95	530	J
21.	UNKNOWN	39.17	690	J
22.	UNKNOWN ALIP. HYDROCARBON	39.97	820	J
23.	UNKNOWN ALIP. HYDROCARBON	40.20	4600	J
24.	UNKNOWN	42.05	900	J
25.	UNKNOWN	47.48	920	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X202

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344847

Sample wt/vol: 31.0 (g/mL) G Lab File ID: _____

% Moisture: 30 decanted: (Y/N) N Date Received: 10/27/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/28/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/04/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4 ~~0.36~~	~~BJP~~ U am
1024-57-3	Heptachlor epoxide	0.17	JP
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	2.6	J
72-55-9	4,4'-DDE	0.44	JP
72-20-8	Endrin	0.90	J
33213-65-9	Endosulfan II	4.6	U
50-29-3	4,4'-DDD	0.92	JP
1031-07-8	Endosulfan sulfate	4.6	U
50-29-3	4,4'-DDT	0.44	J
72-43-5	Methoxychlor	24	U
53494-70-5	Endrin ketone	0.51	J
7421-36-3	Endrin aldehyde	4.6	U
5103-71-9	alpha-Chlordane	3.1	P
5103-74-2	gamma-Chlordane	2.5	
8001-35-2	Toxaphene	110	JP
12674-11-2	Aroclor-1016	46	U
11104-28-2	Aroclor-1221	93	U
11141-16-5	Aroclor-1232	46	U
53469-21-9	Aroclor-1242	46	U
12672-29-6	Aroclor-1248	46	U
11097-69-1	Aroclor-1254	46	U
11096-82-5	Aroclor-1260	9.3	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344848

Sample wt/vol: 30.60 (g/mL) G Lab File ID: B1102E11

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 42 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	560	U
111-44-4	bis(2-Chloroethyl)Ether	560	U
95-57-8	2-Chlorophenol	560	U
541-73-1	1,3-Dichlorobenzene	560	U
106-46-7	1,4-Dichlorobenzene	560	U
95-50-1	1,2-Dichlorobenzene	560	U
95-48-7	2-Methylphenol	560	U
108-60-1	2,2'-oxybis(1-Chloropropane)	560	U
106-44-5	4-Methylphenol	560	U
621-64-7	N-Nitroso-Di-n-Propylamine	560	U
67-72-1	Hexachloroethane	560	U
98-95-3	Nitrobenzene	560	U
78-59-1	Isophorone	560	U
88-75-5	2-Nitrophenol	560	U
105-67-9	2,4-Dimethylphenol	560	U
111-91-1	bis(2-Chloroethoxy)Methane	560	U
120-83-2	2,4-Dichlorophenol	560	U
120-82-1	1,2,4-Trichlorobenzene	560	U
91-20-3	Naphthalene	560	U
106-47-8	4-Chloroaniline	560	UJ
87-68-3	Hexachlorobutadiene	560	U
59-50-7	4-Chloro-3-Methylphenol	560	U
91-57-6	2-Methylnaphthalene	560	U
77-47-4	Hexachlorocyclopentadiene	560	U
88-06-2	2,4,6-Trichlorophenol	560	U
95-95-4	2,4,5-Trichlorophenol	1400	U
91-58-7	2-Chloronaphthalene	560	U
88-74-4	2-Nitroaniline	1400	U
131-11-3	Dimethylphthalate	560	U
208-96-8	Acenaphthylene	560	U
606-20-2	2,6-Dinitrotoluene	560	U
99-09-2	3-Nitroaniline	1400	UJ
83-32-9	Acenaphthene	560	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344848

Sample wt/vol: 30.60 (g/mL) G Lab File ID: B1102E11

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 42 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1400	U	
100-02-7	4-Nitrophenol	1400	U	
132-64-9	Dibenzofuran	560	U	
121-14-2	2,4-Dinitrotoluene	560	U	
84-66-2	Diethylphthalate	560	U	
7005-72-3	4-Chlorophenyl-phenylether	560	U	
86-73-7	Fluorene	560	U	
100-10-6	4-Nitroaniline	1400	~~U~~R	am
534-52-1	4,6-Dinitro-2-methylphenol	1400	U	
86-30-6	N-Nitrosodiphenylamine (1)	560	U	
101-55-3	4-Bromophenyl-phenylether	560	U	
118-74-1	Hexachlorobenzene	560	U	
87-86-5	Pentachlorophenol	1400	U	
85-01-8	Phenanthrene	260	J	
120-12-7	Anthracene	560	U	
86-74-8	Carbazole	560	U	
84-74-2	Di-n-Butylphthalate	1400	~~B~~U	am
206-44-0	Fluoranthene	520	J	
129-00-0	Pyrene	520	J	
85-68-7	Butylbenzylphthalate	560	U	
91-94-1	3,3'-Dichlorobenzidine	560	UJ	
56-55-3	Benzo(a)Anthracene	230	J	
218-01-9	Chrysene	310	J	
117-81-7	bis(2-Ethylhexyl)Phthalate	660		
117-84-0	Di-n-Octyl Phthalate	560	U	
205-99-2	Benzo(b)Fluoranthene	480	J	
207-08-9	Benzo(k)Fluoranthene	560	U	
50-32-8	Benzo(a)Pyrene	230	J	
193-39-5	Indeno(1,2,3-cd)Pyrene	560	U	
53-70-3	Dibenz(a,h)Anthracene	560	U	
191-24-2	Benzo(g,h,i)Perylene	560	U	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344848

Sample wt/vol: 30.60 (g/mL) G Lab File ID: B1102E11

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 42 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

Number TICs found: 26

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.17	1700	~~BJ~~ U am
2.	UNKNOWN	31.27	140	J
3.	UNKNOWN	31.53	390	J
4.	UNKNOWN	31.88	170	J
5.	UNKNOWN ALIP. HYDROCARBON	32.50	1800	J
6.	UNKNOWN	32.85	110	J
7.	UNKNOWN	33.42	610	J
8.	UNKNOWN	33.80	310	J
9.	UNKNOWN	34.28	280	J
10.	UNKNOWN ALIP. HYDROCARBON	34.40	2800	J
11.	UNKNOWN	34.70	380	J
12.	UNKNOWN	35.52	600	J
13.	UNKNOWN	35.90	220	J
14.	UNKNOWN	36.07	1600	J
15.	UNKNOWN	36.58	700	J
16.	UNKNOWN ALIP. HYDROCARBON	36.65	1000	J
17.	UNKNOWN ALIP. HYDROCARBON	36.82	6900	J
18.	UNKNOWN	36.95	1500	J
19.	UNKNOWN	37.18	170	J
20.	UNKNOWN	37.50	150	J
21.	UNKNOWN	37.67	390	J
22.	UNKNOWN	37.70	180	J
23.	UNKNOWN	38.15	1100	J
24.	UNKNOWN	38.35	750	J
25.	UNKNOWN	39.20	1500	J
26.	UNKNOWN ALIP. HYDROCARBON	40.23	4700	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344848

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 42 decanted: (Y/N) N Date Received: 10/27/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/28/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/04/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.9	U
319-85-7	beta-BHC	2.9	U
319-86-8	delta-BHC	2.9	U
58-89-9	gamma-BHC (Lindane)	2.9	U
76-44-8	Heptachlor	2.9	U
309-00-2	Aldrin	4.4	~~B~~P
1024-57-3	Heptachlor epoxide	2.9	U
959-98-8	Endosulfan I	2.9	U
60-57-1	Dieldrin	16	P
72-55-9	4,4'-DDE	5.7	U
72-20-8	Endrin	18	P
33213-65-9	Endosulfan II	5.7	U
50-29-3	4,4'-DDD	7.5	P
1031-07-8	Endosulfan sulfate	5.7	U
50-29-3	4,4'-DDT	11	P
72-43-5	Methoxychlor	29	U
53494-70-5	Endrin ketone	5.7	U
7421-36-3	Endrin aldehyde	5.7	U
5103-71-9	alpha-Chlordane	16	P
5103-74-2	gamma-Chlordane	15	P
8001-35-2	Toxaphene	290	U
12674-11-2	Aroclor-1016	57	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	57	U
53469-21-9	Aroclor-1242	57	U
12672-29-6	Aroclor-1248	57	U
11097-69-1	Aroclor-1254	250	
11096-82-5	Aroclor-1260	110	P

arn

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X203RE

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344848RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1101BK04

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 42 Date Analyzed: 11/01/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	17	U
74-83-9	Bromomethane	17	U
75-01-4	Vinyl Chloride	17	U
75-00-3	Chloroethane	17	U
75-09-2	Methylene Chloride	17 ~~8~~	~~BJ~~U am
67-64-1	Acetone	12	J
75-15-0	Carbon Disulfide	17	U
75-35-4	1,1-Dichloroethene	17	U
75-34-3	1,1-Dichloroethane	17	U
540-59-0	1,2-Dichloroethene (total)	17	U
107-06-2	1,2-Dichloroethane	17	U
78-93-3	2-Butanone	6	J
71-55-6	1,1,1-Trichloroethane	17	UJ
56-23-5	Carbon Tetrachloride	17	UJ
75-27-4	Bromodichloromethane	17	UJ
78-87-5	1,2-Dichloropropane	17	UJ
10061-01-5	cis-1,3-Dichloropropene	17	UJ
79-01-6	Trichloroethene	17	UJ
124-48-1	Dibromochloromethane	17	UJ
79-00-5	1,1,2-Trichloroethane	17	UJ
71-43-2	Benzene	17	UJ
10061-02-6	trans-1,3-Dichloropropene	17	UJ
75-25-2	Bromoform	17	UJ
108-10-1	4-Methyl-2-Pentanone	17	UJ
591-78-6	2-Hexanone	17	UJ
127-18-4	Tetrachloroethene	17	U
79-34-5	1,1,2,2-Tetrachloroethane	17	U
108-88-3	Toluene	17	U
108-90-7	Chlorobenzene	17	U
100-41-4	Ethylbenzene	17	U
100-42-5	Styrene	17	U
1330-20-7	Xylene (total)	17	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X203RE

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344848RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1101BK04

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 42 Date Analyzed: 11/01/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X204

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344849

Sample wt/vol: 30.30 (g/mL) G Lab File ID: B1102E12

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 55 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	730	U
111-44-4	bis(2-Chloroethyl)Ether	730	U
95-57-8	2-Chlorophenol	730	U
541-73-1	1,3-Dichlorobenzene	730	U
106-46-7	1,4-Dichlorobenzene	730	U
95-50-1	1,2-Dichlorobenzene	730	U
95-48-7	2-Methylphenol	730	U
108-60-1	2,2'-oxybis(1-Chloropropane)	730	U
106-44-5	4-Methylphenol	730	U
621-64-7	N-Nitroso-Di-n-Propylamine	730	U
67-72-1	Hexachloroethane	730	U
98-95-3	Nitrobenzene	730	U
78-59-1	Isophorone	730	U
88-75-5	2-Nitrophenol	730	U
105-67-9	2,4-Dimethylphenol	730	U
111-91-1	bis(2-Chloroethoxy)Methane	730	U
120-83-2	2,4-Dichlorophenol	730	U
120-82-1	1,2,4-Trichlorobenzene	730	U
91-20-3	Naphthalene	730	U
106-47-8	4-Chloroaniline	730	UJ
87-68-3	Hexachlorobutadiene	730	U
59-50-7	4-Chloro-3-Methylphenol	730	U
91-57-6	2-Methylnaphthalene	730	U
77-47-4	Hexachlorocyclopentadiene	730	U
88-06-2	2,4,6-Trichlorophenol	730	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	730	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethylphthalate	730	U
208-96-8	Acenaphthylene	730	U
606-20-2	2,6-Dinitrotoluene	730	U
99-09-2	3-Nitroaniline	1800	UJ
83-32-9	Acenaphthene	730	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X204

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344849

Sample wt/vol: 30.30 (g/mL) G Lab File ID: B1102E12

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 55 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1800	U	
100-02-7	4-Nitrophenol	1800	U	
132-64-9	Dibenzofuran	730	U	
121-14-2	2,4-Dinitrotoluene	730	U	
84-66-2	Diethylphthalate	730	U	
7005-72-3	4-Chlorophenyl-phenylether	730	U	
86-73-7	Fluorene	730	U	
100-10-6	4-Nitroaniline	1800	~~U~~R	an
534-52-1	4,6-Dinitro-2-methylphenol	1800	U	
86-30-6	N-Nitrosodiphenylamine (1)	730	U	
101-55-3	4-Bromophenyl-phenylether	730	U	
118-74-1	Hexachlorobenzene	730	U	
87-86-5	Pentachlorophenol	1800	U	
85-01-8	Phenanthrene	1900		
120-12-7	Anthracene	320	J	
86-74-8	Carbazole	290	J	
84-74-2	Di-n-Butylphthalate	2000	~~B~~U	an
206-44-0	Fluoranthene	1700		
129-00-0	Pyrene	1600		
85-68-7	Butylbenzylphthalate	730	U	
91-94-1	3,3'-Dichlorobenzidine	730	UJ	
56-55-3	Benzo(a)Anthracene	850		
218-01-9	Chrysene	670	J	
117-81-7	bis(2-Ethylhexyl)Phthalate	730	U	
117-84-0	Di-n-Octyl Phthalate	730	U	
205-99-2	Benzo(b)Fluoranthene	730	U	
207-08-9	Benzo(k)Fluoranthene	1200		
50-32-8	Benzo(a)Pyrene	810		
193-39-5	Indeno(1,2,3-cd)Pyrene	730	U	
53-70-3	Dibenz(a,h)Anthracene	730	U	
191-24-2	Benzo(g,h,i)Perylene	730	U	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X204

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344849

Sample wt/vol: 30.30 (g/mL) G Lab File ID: B1102E12

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 55 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

Number TICs found: 28

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.20	2800	~~BJ~~ U am
2.	UNKNOWN ALIP. HYDROCARBON	18.98	270	J
3.	UNKNOWN ALIP. HYDROCARBON	20.85	740	J
4.	UNKNOWN	29.32	780	J
5.	UNKNOWN	30.42	670	J
6.	UNKNOWN	30.73	250	J
7.	UNKNOWN	31.00	310	J
8.	UNKNOWN ALIP. ACID ESTER	31.60	2500	J
9.	UNKNOWN	32.52	2600	J
10.	UNKNOWN	32.87	260	J
11.	UNKNOWN	33.45	600	J
12.	UNKNOWN	33.82	250	J
13.	UNKNOWN	34.18	310	J
14.	UNKNOWN ALIP. HYDROCARBON	34.42	3300	J
15.	UNKNOWN	34.47	980	J
16.	UNKNOWN	35.52	570	J
17.	UNKNOWN	35.65	220	J
18.	UNKNOWN	35.92	170	J
19.	UNKNOWN	36.08	1200	J
20.	UNKNOWN	36.62	1100	J
21.	UNKNOWN	36.63	1800	J
22.	UNKNOWN ALIP. HYDROCARBON	36.83	6900	J
23.	UNKNOWN	36.98	1300	J
24.	UNKNOWN	37.20	200	J
25.	UNKNOWN PNA	37.68	1400	J
26.	UNKNOWN	38.38	820	J
27.	UNKNOWN	39.22	660	J
28.	UNKNOWN ALIP. HYDROCARBON	40.25	4800	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X204

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344849

Sample wt/vol: 30.6 (g/mL) G Lab File ID: _____

% Moisture: 55 decanted: (Y/N) N Date Received: 10/27/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/28/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/04/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.7	U
319-85-7	beta-BHC	3.7	U
319-86-8	delta-BHC	3.7	U
58-89-9	gamma-BHC (Lindane)	3.7	U
76-44-8	Heptachlor	3.7	U
309-00-2	Aldrin	3.7 ~~0.50~~	~~BJP~~ U am
1024-57-3	Heptachlor epoxide	1.3	JP
959-98-8	Endosulfan I	3.7	U
60-57-1	Dieldrin	12	P
72-55-9	4,4'-DDE	7.2	U
72-20-8	Endrin	12	
33213-65-9	Endosulfan II	7.2	U
50-29-3	4,4'-DDD	6.0	JP
1031-07-8	Endosulfan sulfate	7.2	U
50-29-3	4,4'-DDT	15	P
72-43-5	Methoxychlor	37	U
53494-70-5	Endrin ketone	7.2	U
7421-36-3	Endrin aldehyde	7.2	U
5103-71-9	alpha-Chlordane	7.0	P
5103-74-2	gamma-Chlordane	7.4	P
8001-35-2	Toxaphene	370	U
12674-11-2	Aroclor-1016	72	U
11104-28-2	Aroclor-1221	150	U
11141-16-5	Aroclor-1232	72	U
53469-21-9	Aroclor-1242	72	U
12672-29-6	Aroclor-1248	72	U
11097-69-1	Aroclor-1254	120	
11096-82-5	Aroclor-1260	100	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X204RE

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344849RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1101BK05

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 55 Date Analyzed: 11/01/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	22	U
74-83-9	Bromomethane	22	U
75-01-4	Vinyl Chloride	22	U
75-00-3	Chloroethane	22	U
75-09-2	Methylene Chloride	22 ~~B~~	~~B~~ U am
67-64-1	Acetone	22	UJ
75-15-0	Carbon Disulfide	22	U
75-35-4	1,1-Dichloroethene	22	U
75-34-3	1,1-Dichloroethane	22	U
540-59-0	1,2-Dichloroethene (total)	22	U
107-06-2	1,2-Dichloroethane	22	U
78-93-3	2-Butanone	22	UJ
71-55-6	1,1,1-Trichloroethane	27	J
56-23-5	Carbon Tetrachloride	22	UJ
75-27-4	Bromodichloromethane	22	UJ
78-87-5	1,2-Dichloropropane	22	UJ
10061-01-5	cis-1,3-Dichloropropene	22	UJ
79-01-6	Trichloroethene	22	UJ
124-48-1	Dibromochloromethane	22	UJ
79-00-5	1,1,2-Trichloroethane	22	UJ
71-43-2	Benzene	22	UJ
10061-02-6	trans-1,3-Dichloropropene	22	UJ
75-25-2	Bromoform	22	UJ
108-10-1	4-Methyl-2-Pentanone	22	UJ
591-78-6	2-Hexanone	22	UJ
127-18-4	Tetrachloroethene	22	UJ
79-34-5	1,1,2,2-Tetrachloroethane	22	UJ
108-88-3	Toluene	22	UJ
108-90-7	Chlorobenzene	22	UJ
100-41-4	Ethylbenzene	22	UJ
100-42-5	Styrene	22	UJ
1330-20-7	Xylene (total)	22	UJ

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X204RE

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344849RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1101BK05

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 55 Date Analyzed: 11/01/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X205

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344850

Sample wt/vol: 30.20 (g/mL) G Lab File ID: B1102E07

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 31 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	480	U
111-44-4	bis(2-Chloroethyl)Ether	480	U
95-57-8	2-Chlorophenol	480	U
541-73-1	1,3-Dichlorobenzene	480	U
106-46-7	1,4-Dichlorobenzene	480	U
95-50-1	1,2-Dichlorobenzene	480	U
95-48-7	2-Methylphenol	480	U
108-60-1	2,2'-oxybis(1-Chloropropane)	480	U
106-44-5	4-Methylphenol	480	U
621-64-7	N-Nitroso-Di-n-Propylamine	480	U
67-72-1	Hexachloroethane	480	U
98-95-3	Nitrobenzene	480	U
78-59-1	Isophorone	480	U
88-75-5	2-Nitrophenol	480	U
105-67-9	2,4-Dimethylphenol	480	U
111-91-1	bis(2-Chloroethoxy)Methane	480	U
120-83-2	2,4-Dichlorophenol	480	U
120-82-1	1,2,4-Trichlorobenzene	480	U
91-20-3	Naphthalene	480	U
106-47-8	4-Chloroaniline	480	UJ
87-68-3	Hexachlorobutadiene	480	U
59-50-7	4-Chloro-3-Methylphenol	480	U
91-57-6	2-Methylnaphthalene	100	J
77-47-4	Hexachlorocyclopentadiene	480	U
88-06-2	2,4,6-Trichlorophenol	480	U
95-95-4	2,4,5-Trichlorophenol	1200	U
91-58-7	2-Chloronaphthalene	480	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	480	U
208-96-8	Acenaphthylene	480	U
606-20-2	2,6-Dinitrotoluene	480	U
99-09-2	3-Nitroaniline	1200	UJ
83-32-9	Acenaphthene	480	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X205

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344850

Sample wt/vol: 30.20 (g/mL) G Lab File ID: B1102E07

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 31 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1200	U	
100-02-7	4-Nitrophenol	1200	U	
132-64-9	Dibenzofuran	480	U	
121-14-2	2,4-Dinitrotoluene	480	U	
84-66-2	Diethylphthalate	480	U	
7005-72-3	4-Chlorophenyl-phenylether	480	U	
86-73-7	Fluorene	480	U	
100-10-6	4-Nitroaniline	1200	~~U~~R	am
534-52-1	4,6-Dinitro-2-methylphenol	1200	U	
86-30-6	N-Nitrosodiphenylamine (1)	480	U	
101-55-3	4-Bromophenyl-phenylether	480	U	
118-74-1	Hexachlorobenzene	480	U	
87-86-5	Pentachlorophenol	1200	U	
85-01-8	Phenanthrene	480	U	
120-12-7	Anthracene	480	U	
86-74-8	Carbazole	480	U	
84-74-2	Di-n-Butylphthalate	1200	~~B~~U	am
206-44-0	Fluoranthene	480	U	
129-00-0	Pyrene	480	U	
85-68-7	Butylbenzylphthalate	480	U	
91-94-1	3,3'-Dichlorobenzidine	480	UJ	
56-55-3	Benzo(a)Anthracene	480	U	
218-01-9	Chrysene	480	U	
117-81-7	bis(2-Ethylhexyl)Phthalate	480	U	
117-84-0	Di-n-Octyl Phthalate	480	U	
205-99-2	Benzo(b)Fluoranthene	480	U	
207-08-9	Benzo(k)Fluoranthene	480	U	
50-32-8	Benzo(a)Pyrene	480	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	480	U	
53-70-3	Dibenz(a,h)Anthracene	480	U	
191-24-2	Benzo(g,h,i)Perylene	480	U	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X205

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344850

Sample wt/vol: 30.20 (g/mL) G Lab File ID: B1102E07

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 31 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs found: 16

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	UNKNOWN	10.18	1600	~~BJ~~ U	am
2.	UNKNOWN	10.90	540	~~BJ~~ U	am
3.	UNKNOWN	13.15	330	J	
4.	UNKNOWN	20.30	150	J	
5.	UNKNOWN ALIP. ACID	22.37	470	~~BJ~~ U	am
6.	UNKNOWN	23.63	200	J	
7.	UNKNOWN ALIP. HYDROCARBON	23.70	610	J	
8.	UNKNOWN	25.50	190	J	
9.	UNKNOWN ALIP. HYDROCARBON	26.13	180	J	
10.	UNKNOWN	32.50	660	J	
11.	UNKNOWN ALIP. HYDROCARBON	34.38	530	J	
12.	UNKNOWN	36.03	450	J	
13.	UNKNOWN ALIP. HYDROCARBON	36.78	1500	J	
14.	UNKNOWN	36.95	650	J	
15.	UNKNOWN ALIP. HYDROCARBON	40.18	1100	J	
16.	UNKNOWN	45.33	1200	J	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X205

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344850

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 31 decanted: (Y/N) N Date Received: 10/27/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/28/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/04/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5 ~~0.28~~	~~BJP~~ U an
1024-57-3	Heptachlor epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	4.8	U
72-55-9	4,4'-DDE	4.8	U
72-20-8	Endrin	2.4	J
33213-65-9	Endosulfan II	4.8	U
50-29-3	4,4'-DDD	4.8	U
1031-07-8	Endosulfan sulfate	4.8	U
50-29-3	4,4'-DDT	4.8	U
72-43-5	Methoxychlor	25	U
53494-70-5	Endrin ketone	1.6	J
7421-36-3	Endrin aldehyde	4.8	U
5103-71-9	alpha-Chlordane	2.5	U
5103-74-2	gamma-Chlordane	2.5	U
8001-35-2	Toxaphene	250	U
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	97	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	48	U
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	48	U
11096-82-5	Aroclor-1260	48	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X205RE

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344850RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1101BK06

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 31 Date Analyzed: 11/01/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	24	~~B~~U am
67-64-1	Acetone	37	J
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	20	J
71-55-6	1,1,1-Trichloroethane	9	J
56-23-5	Carbon Tetrachloride	14	UJ
75-27-4	Bromodichloromethane	14	UJ
78-87-5	1,2-Dichloropropane	14	UJ
10061-01-5	cis-1,3-Dichloropropene	14	UJ
79-01-6	Trichloroethene	14	UJ
124-48-1	Dibromochloromethane	14	UJ
79-00-5	1,1,2-Trichloroethane	14	UJ
71-43-2	Benzene	14	UJ
10061-02-6	trans-1,3-Dichloropropene	14	UJ
75-25-2	Bromoform	14	UJ
108-10-1	4-Methyl-2-Pentanone	14	UJ
591-78-6	2-Hexanone	14	UJ
127-18-4	Tetrachloroethene	14	UJ
79-34-5	1,1,2,2-Tetrachloroethane	14	UJ
108-88-3	Toluene	14	UJ
108-90-7	Chlorobenzene	14	UJ
100-41-4	Ethylbenzene	14	UJ
100-42-5	Styrene	14	UJ
1330-20-7	Xylene (total)	14	UJ

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X205RE

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344850RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1101BK06

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 31 Date Analyzed: 11/01/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 629-14-1	ETHANE, 1,2-DIETHOXY-	6.45	17	JN

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X206

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344851

Sample wt/vol: 30.60 (g/mL) G Lab File ID: B1102E05

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 72 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/02/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1200	U
111-44-4	bis(2-Chloroethyl)Ether	1200	U
95-57-8	2-Chlorophenol	1200	U
541-73-1	1,3-Dichlorobenzene	1200	U
106-46-7	1,4-Dichlorobenzene	1200	U
95-50-1	1,2-Dichlorobenzene	1200	U
95-48-7	2-Methylphenol	1200	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1200	U
106-44-5	4-Methylphenol	1200	U
621-64-7	N-Nitroso-Di-n-Propylamine	1200	U
67-72-1	Hexachloroethane	1200	U
98-95-3	Nitrobenzene	1200	U
78-59-1	Isophorone	1200	U
88-75-5	2-Nitrophenol	1200	U
105-67-9	2,4-Dimethylphenol	1200	U
111-91-1	bis(2-Chloroethoxy)Methane	1200	U
120-83-2	2,4-Dichlorophenol	1200	U
120-82-1	1,2,4-Trichlorobenzene	1200	U
91-20-3	Naphthalene	1200	U
106-47-8	4-Chloroaniline	1200	UJ
87-68-3	Hexachlorobutadiene	1200	U
59-50-7	4-Chloro-3-Methylphenol	1200	U
91-57-6	2-Methylnaphthalene	1200	U
77-47-4	Hexachlorocyclopentadiene	1200	U
88-06-2	2,4,6-Trichlorophenol	1200	U
95-95-4	2,4,5-Trichlorophenol	2800	U
91-58-7	2-Chloronaphthalene	1200	U
88-74-4	2-Nitroaniline	2800	U
131-11-3	Dimethylphthalate	1200	U
208-96-8	Acenaphthylene	1200	U
606-20-2	2,6-Dinitrotoluene	1200	U
99-09-2	3-Nitroaniline	2800	UJ
83-32-9	Acenaphthene	1200	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X206

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344851

Sample wt/vol: 30.60 (g/mL) G Lab File ID: B1102E05

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 72 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/02/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	2800	U	
100-02-7	4-Nitrophenol	2800	U	
132-64-9	Dibenzofuran	1200	U	
121-14-2	2,4-Dinitrotoluene	1200	U	
84-66-2	Diethylphthalate	1200	U	
7005-72-3	4-Chlorophenyl-phenylether	1200	U	
86-73-7	Fluorene	1200	U	
100-10-6	4-Nitroaniline	2800	~~U~~R	am
534-52-1	4,6-Dinitro-2-methylphenol	2800	U	
86-30-6	N-Nitrosodiphenylamine (1)	1200	U	
101-55-3	4-Bromophenyl-phenylether	1200	U	
118-74-1	Hexachlorobenzene	1200	U	
87-86-5	Pentachlorophenol	2800	U	
85-01-8	Phenanthrene	1200	U	
120-12-7	Anthracene	1200	U	
86-74-8	Carbazole	1200	U	
84-74-2	Di-n-Butylphthalate	3200	~~B~~U	am
206-44-0	Fluoranthene	1200	U	
129-00-0	Pyrene	1200	U	
85-68-7	Butylbenzylphthalate	1200	U	
91-94-1	3,3'-Dichlorobenzidine	1200	UJ	
56-55-3	Benzo(a)Anthracene	1200	U	
218-01-9	Chrysene	1200	U	
117-81-7	bis(2-Ethylhexyl)Phthalate	1200	U	
117-84-0	Di-n-Octyl Phthalate	1200	U	
205-99-2	Benzo(b)Fluoranthene	1200	U	
207-08-9	Benzo(k)Fluoranthene	1200	U	
50-32-8	Benzo(a)Pyrene	1200	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	1200	U	
53-70-3	Dibenz(a,h)Anthracene	1200	U	
191-24-2	Benzo(g,h,i)Perylene	1200	U	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X206

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344851

Sample wt/vol: 30.60 (g/mL) G Lab File ID: B1102E05

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 72 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/02/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	UNKNOWN	10.20	3800	~~BJ~~ U	am
2.	UNKNOWN	10.92	1100	~~BJ~~ U	am
3.	UNKNOWN ALIP. HYDROCARBON	20.85	530	J	
4.	UNKNOWN ALIP. ACID	22.38	1000	~~BJ~~ U	am
5.	UNKNOWN ALIP. ACID	26.87	1100	J	
6.	UNKNOWN	29.88	950	J	
7.	UNKNOWN	30.57	1800	J	
8.	UNKNOWN	31.55	1300	J	
9.	UNKNOWN	31.92	640	J	
10.	UNKNOWN	32.53	4400	J	
11.	UNKNOWN	32.68	360	J	
12.	UNKNOWN ALIP. HYDROCARBON	33.45	950	J	
13.	UNKNOWN	33.82	250	J	
14.	UNKNOWN	34.42	3100	J	
15.	UNKNOWN	34.50	1200	J	
16.	UNKNOWN	35.52	610	J	
17.	UNKNOWN	36.07	1900	J	
18.	UNKNOWN	36.68	390	J	
19.	UNKNOWN ALIP. HYDROCARBON	36.82	3600	J	
20.	UNKNOWN	47.48	4200	J	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X206

ab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344851

Sample wt/vol: 30.8 (g/mL) G Lab File ID: _____

% Moisture: 72 decanted: (Y/N) N Date Received: 10/27/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/28/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/04/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.5	J
319-85-7	beta-BHC	1.0	JP
319-86-8	delta-BHC	5.9	U
58-89-9	gamma-BHC (Lindane)	1.1	JP
76-44-8	Heptachlor	5.9	U
309-00-2	Aldrin	5.9 ~~0.92~~	~~BJP~~ U an
1024-57-3	Heptachlor epoxide	4.7	J
959-98-8	Endosulfan I	5.9	U
60-57-1	Dieldrin	10	J
72-55-9	4,4'-DDE	0.72	JP
72-20-8	Endrin	11	U
33213-65-9	Endosulfan II	11	U
50-29-3	4,4'-DDD	1.8	JP
1031-07-8	Endosulfan sulfate	11	U
50-29-3	4,4'-DDT	4.8	J
72-43-5	Methoxychlor	13	J
53494-70-5	Endrin ketone	11	U
7421-36-3	Endrin aldehyde	11	U
5103-71-9	alpha-Chlordane	1.7	JP
5103-74-2	gamma-Chlordane	3.0	J
8001-35-2	Toxaphene	590	U
12674-11-2	Aroclor-1016	110	U
11104-28-2	Aroclor-1221	230	U
11141-16-5	Aroclor-1232	110	U
53469-21-9	Aroclor-1242	110	U
12672-29-6	Aroclor-1248	110	U
11097-69-1	Aroclor-1254	110	U
11096-82-5	Aroclor-1260	110	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X206RE

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344851RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1101BK07

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 72 Date Analyzed: 11/01/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	36	U
74-83-9	Bromomethane	36	U
75-01-4	Vinyl Chloride	36	U
75-00-3	Chloroethane	36	U
75-09-2	Methylene Chloride	160	~~B~~ J am
67-64-1	Acetone	76	J
75-15-0	Carbon Disulfide	36	U
75-35-4	1,1-Dichloroethene	36	U
75-34-3	1,1-Dichloroethane	36	U
540-59-0	1,2-Dichloroethene (total)	36	U
107-06-2	1,2-Dichloroethane	36	U
78-93-3	2-Butanone	48	J
71-55-6	1,1,1-Trichloroethane	290	J
56-23-5	Carbon Tetrachloride	36	UJ
75-27-4	Bromodichloromethane	36	UJ
78-87-5	1,2-Dichloropropane	36	UJ
10061-01-5	cis-1,3-Dichloropropene	36	UJ
79-01-6	Trichloroethene	36	UJ
124-48-1	Dibromochloromethane	36	UJ
79-00-5	1,1,2-Trichloroethane	36	UJ
71-43-2	Benzene	36	UJ
10061-02-6	trans-1,3-Dichloropropene	36	UJ
75-25-2	Bromoform	36	UJ
108-10-1	4-Methyl-2-Pentanone	36	UJ
591-78-6	2-Hexanone	36	UJ
127-18-4	Tetrachloroethene	36	UJ
79-34-5	1,1,2,2-Tetrachloroethane	36	UJ
108-88-3	Toluene	36	J
108-90-7	Chlorobenzene	36	UJ
100-41-4	Ethylbenzene	36	UJ
100-42-5	Styrene	36	UJ
1330-20-7	Xylene (total)	36	UJ

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X206RE

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344851RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1101BK07

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 72 Date Analyzed: 11/01/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.48	74	J
2. 624-92-0	DISULFIDE, DIMETHYL	16.00	70	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X207

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344852

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1029BK10

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 26 Date Analyzed: 10/29/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	14	~~BJ~~U am
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	UJ
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	UJ
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	14	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X207

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344852

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1029BK10

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 26 Date Analyzed: 10/29/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X207

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344852

Sample wt/vol: 30.60 (g/mL) G Lab File ID: B1102E10

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 26 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	440	U
111-44-4	bis(2-Chloroethyl)Ether	440	U
95-57-8	2-Chlorophenol	440	U
541-73-1	1,3-Dichlorobenzene	440	U
106-46-7	1,4-Dichlorobenzene	440	U
95-50-1	1,2-Dichlorobenzene	440	U
95-48-7	2-Methylphenol	440	U
108-60-1	2,2'-oxybis(1-Chloropropane)	440	U
106-44-5	4-Methylphenol	440	U
621-64-7	N-Nitroso-Di-n-Propylamine	440	U
67-72-1	Hexachloroethane	440	U
98-95-3	Nitrobenzene	440	U
78-59-1	Isophorone	440	U
88-75-5	2-Nitrophenol	440	U
105-67-9	2,4-Dimethylphenol	440	U
111-91-1	bis(2-Chloroethoxy)Methane	440	U
120-83-2	2,4-Dichlorophenol	440	U
120-82-1	1,2,4-Trichlorobenzene	440	U
91-20-3	Naphthalene	440	U
106-47-8	4-Chloroaniline	440	UJ
87-68-3	Hexachlorobutadiene	440	U
59-50-7	4-Chloro-3-Methylphenol	440	U
91-57-6	2-Methylnaphthalene	440	U
77-47-4	Hexachlorocyclopentadiene	440	U
88-06-2	2,4,6-Trichlorophenol	440	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	440	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	440	U
208-96-8	Acenaphthylene	440	U
606-20-2	2,6-Dinitrotoluene	440	U
99-09-2	3-Nitroaniline	1100	UJ
83-32-9	Acenaphthene	440	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X207

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344852

Sample wt/vol: 30.60 (g/mL) G Lab File ID: B1102E10

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 26 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1100	U	
100-02-7	4-Nitrophenol	1100	U	
132-64-9	Dibenzofuran	440	U	
121-14-2	2,4-Dinitrotoluene	440	U	
84-66-2	Diethylphthalate	440	U	
7005-72-3	4-Chlorophenyl-phenylether	440	U	
86-73-7	Fluorene	440	U	
100-10-6	4-Nitroaniline	1100	~~U~~R	am
534-52-1	4,6-Dinitro-2-methylphenol	1100	U	
86-30-6	N-Nitrosodiphenylamine (1)	440	U	
101-55-3	4-Bromophenyl-phenylether	440	U	
118-74-1	Hexachlorobenzene	440	U	
87-86-5	Pentachlorophenol	1100	U	
85-01-8	Phenanthrene	440	U	
120-12-7	Anthracene	440	U	
86-74-8	Carbazole	440	U	
84-74-2	Di-n-Butylphthalate	1100	~~B~~u	am
206-44-0	Fluoranthene	130	J	
129-00-0	Pyrene	140	J	
85-68-7	Butylbenzylphthalate	440	U	
91-94-1	3,3'-Dichlorobenzidine	440	UJ	
56-55-3	Benzo(a)Anthracene	100	J	
218-01-9	Chrysene	120	J	
117-81-7	bis(2-Ethylhexyl)Phthalate	440	U	
117-84-0	Di-n-Octyl Phthalate	440	U	
205-99-2	Benzo(b)Fluoranthene	140	J	
207-08-9	Benzo(k)Fluoranthene	440	U	
50-32-8	Benzo(a)Pyrene	440	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	440	U	
53-70-3	Dibenz(a,h)Anthracene	440	U	
191-24-2	Benzo(g,h,i)Perylene	440	U	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X207

.b Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344852

Sample wt/vol: 30.60 (g/mL) G Lab File ID: B1102E10

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 26 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/03/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	UNKNOWN	10.18	1500	~~BJ~~ U	am
2.	UNKNOWN ALIP. ACID	22.37	320	~~BJ~~ U	am
3.	UNKNOWN	23.63	570	J	
4.	UNKNOWN ALIP. HYDROCARBON	23.70	120	J	
5.	UNKNOWN ALIP. HYDROCARBON	24.18	1500	J	
6.	UNKNOWN ALIP. HYDROCARBON	24.92	160	J	
7.	UNKNOWN ALIP. HYDROCARBON	26.13	200	J	
8.	UNKNOWN ALIP. ACID	26.85	150	J	
9.	UNKNOWN ALIP. HYDROCARBON	27.32	160	J	
10.	UNKNOWN ALIP. HYDROCARBON	28.43	130	J	
11.	UNKNOWN ALIP. HYDROCARBON	29.52	200	J	
12.	UNKNOWN ALIP. HYDROCARBON	30.55	310	J	
13.	UNKNOWN ALIP. HYDROCARBON	31.53	440	J	
14.	UNKNOWN ALIP. ACID ESTER	31.57	510	J	
15.	UNKNOWN ALIP. ALCOHOL	32.50	840	J	
16.	UNKNOWN ALIP. HYDROCARBON	33.43	240	J	
17.	UNKNOWN ALIP. HYDROCARBON	34.40	590	J	
18.	UNKNOWN ALIP. HYDROCARBON	36.80	820	J	
19.	UNKNOWN	45.38	790	J	
20.	UNKNOWN	46.15	930	J	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X207

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344852

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 26 decanted: (Y/N) N Date Received: 10/27/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/28/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/04/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.3	U
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	2.3	U
58-89-9	gamma-BHC (Lindane)	2.3	U
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	2.3 ~~0.38~~	~~BJP~~ U am
1024-57-3	Heptachlor epoxide	2.3	U
959-98-8	Endosulfan I	2.3	U
60-57-1	Dieldrin	4.4	U
72-55-9	4,4'-DDE	4.4	U
72-20-8	Endrin	4.4	U
33213-65-9	Endosulfan II	4.4	U
50-29-3	4,4'-DDD	4.4	U
1031-07-8	Endosulfan sulfate	4.4	U
50-29-3	4,4'-DDT	4.4	U
72-43-5	Methoxychlor	23	U
53494-70-5	Endrin ketone	4.4	U
7421-36-3	Endrin aldehyde	4.4	U
5103-71-9	alpha-Chlordane	2.3	U
5103-74-2	gamma-Chlordane	2.3	U
8001-35-2	Toxaphene	230	U
12674-11-2	Aroclor-1016	44	U
11104-28-2	Aroclor-1221	90	U
11141-16-5	Aroclor-1232	44	U
53469-21-9	Aroclor-1242	44	U
12672-29-6	Aroclor-1248	44	U
11097-69-1	Aroclor-1254	44	U
11096-82-5	Aroclor-1260	44	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X208

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344853

Sample wt/vol: 30.50 (g/mL) G Lab File ID: B1102E06

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 42 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/02/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	560	U
111-44-4	bis(2-Chloroethyl)Ether	560	U
95-57-8	2-Chlorophenol	560	U
541-73-1	1,3-Dichlorobenzene	560	U
106-46-7	1,4-Dichlorobenzene	560	U
95-50-1	1,2-Dichlorobenzene	560	U
95-48-7	2-Methylphenol	560	U
108-60-1	2,2'-oxybis(1-Chloropropane)	560	U
106-44-5	4-Methylphenol	560	U
621-64-7	N-Nitroso-Di-n-Propylamine	560	U
67-72-1	Hexachloroethane	560	U
98-95-3	Nitrobenzene	560	U
78-59-1	Isophorone	560	U
88-75-5	2-Nitrophenol	560	U
105-67-9	2,4-Dimethylphenol	560	U
111-91-1	bis(2-Chloroethoxy)Methane	560	U
120-83-2	2,4-Dichlorophenol	560	U
120-82-1	1,2,4-Trichlorobenzene	560	U
91-20-3	Naphthalene	560	U
106-47-8	4-Chloroaniline	560	UJ
87-68-3	Hexachlorobutadiene	560	U
59-50-7	4-Chloro-3-Methylphenol	560	U
91-57-6	2-Methylnaphthalene	560	U
77-47-4	Hexachlorocyclopentadiene	560	U
88-06-2	2,4,6-Trichlorophenol	560	U
95-95-4	2,4,5-Trichlorophenol	1400	U
91-58-7	2-Chloronaphthalene	560	U
88-74-4	2-Nitroaniline	1400	U
131-11-3	Dimethylphthalate	560	U
208-96-8	Acenaphthylene	560	U
606-20-2	2,6-Dinitrotoluene	560	U
99-09-2	3-Nitroaniline	1400	UJ
83-32-9	Acenaphthene	560	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X208

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344853

Sample wt/vol: 30.50 (g/mL) G Lab File ID: B1102E06

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 42 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/02/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1400	U	
100-02-7	4-Nitrophenol	1400	U	
132-64-9	Dibenzofuran	560	U	
121-14-2	2,4-Dinitrotoluene	560	U	
84-66-2	Diethylphthalate	560	U	
7005-72-3	4-Chlorophenyl-phenylether	560	U	
86-73-7	Fluorene	560	U	
100-10-6	4-Nitroaniline	1400	~~U~~R	am
534-52-1	4,6-Dinitro-2-methylphenol	1400	U	
86-30-6	N-Nitrosodiphenylamine (1)	560	U	
101-55-3	4-Bromophenyl-phenylether	560	U	
118-74-1	Hexachlorobenzene	560	U	
87-86-5	Pentachlorophenol	1400	U	
85-01-8	Phenanthrene	560	U	
120-12-7	Anthracene	560	U	
86-74-8	Carbazole	560	U	
84-74-2	Di-n-Butylphthalate	1300	~~B~~U	am
206-44-0	Fluoranthene	560	U	
129-00-0	Pyrene	560	U	
85-68-7	Butylbenzylphthalate	560	U	
91-94-1	3,3'-Dichlorobenzidine	560	UJ	
56-55-3	Benzo(a)Anthracene	560	U	
218-01-9	Chrysene	560	U	
117-81-7	bis(2-Ethylhexyl)Phthalate	560	U	
117-84-0	Di-n-Octyl Phthalate	560	U	
205-99-2	Benzo(b)Fluoranthene	560	U	
207-08-9	Benzo(k)Fluoranthene	560	U	
50-32-8	Benzo(a)Pyrene	560	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	560	U	
53-70-3	Dibenz(a,h)Anthracene	560	U	
191-24-2	Benzo(g,h,i)Perylene	560	U	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X208

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344853

Sample wt/vol: 30.50 (g/mL) G Lab File ID: B1102E06

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: 42 decanted: (Y/N) N Date Extracted: 10/28/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/02/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	UNKNOWN	10.17	2000	~~BJ~~ U	am
2.	UNKNOWN	10.88	610	~~BJ~~ U	am
3.	UNKNOWN ALIP. ACID	22.35	460	~~BJ~~ U	am
4.	UNKNOWN ALIP. HYDROCARBON	24.90	180	J	
5.	UNKNOWN ALIP. HYDROCARBON	28.42	140	J	
6.	UNKNOWN ALIP. HYDROCARBON	29.50	310	J	
7.	UNKNOWN ALIP. HYDROCARBON	30.53	380	J	
8.	UNKNOWN ALIP. ACID ESTER	31.57	1100	J	
9.	UNKNOWN	32.50	1600	J	
10.	UNKNOWN	32.83	170	J	
11.	UNKNOWN ALIP. HYDROCARBON	33.42	480	J	
12.	UNKNOWN ALIP. HYDROCARBON	34.38	2400	J	
13.	UNKNOWN ALIP. HYDROCARBON	35.48	540	J	
14.	UNKNOWN	36.03	460	J	
15.	UNKNOWN	36.62	610	J	
16.	UNKNOWN ALIP. HYDROCARBON	36.80	4800	J	
17.	UNKNOWN	36.95	680	J	
18.	UNKNOWN ALIP. HYDROCARBON	40.18	1700	J	
19.	UNKNOWN	44.75	1500	J	
20.	UNKNOWN	47.50	2700	J	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X208

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344853

Sample wt/vol: 30.8 (g/mL) G Lab File ID: _____

% Moisture: 42 decanted: (Y/N) N Date Received: 10/27/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/28/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/04/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.9	U
319-85-7	beta-BHC	2.9	U
319-86-8	delta-BHC	2.9	U
58-89-9	gamma-BHC (Lindane)	2.9	U
76-44-8	Heptachlor	2.9	U
309-00-2	Aldrin	2.9 ~~0.59~~	~~BJP~~ U am
1024-57-3	Heptachlor epoxide	2.9	U
959-98-8	Endosulfan I	2.9	U
60-57-1	Dieldrin	1.3	JP
72-55-9	4,4'-DDE	5.5	U
72-20-8	Endrin	2.8	JP
33213-65-9	Endosulfan II	3.6	JP
50-29-3	4,4'-DDD	5.1	J
1031-07-8	Endosulfan sulfate	5.5	U
50-29-3	4,4'-DDT	5.5	U
72-43-5	Methoxychlor	29	U
53494-70-5	Endrin ketone	5.5	U
7421-36-3	Endrin aldehyde	5.5	U
5103-71-9	alpha-Chlordane	0.57	J
5103-74-2	gamma-Chlordane	0.73	JP
8001-35-2	Toxaphene	320	P
12674-11-2	Aroclor-1016	55	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	55	U
53469-21-9	Aroclor-1242	55	U
12672-29-6	Aroclor-1248	55	U
11097-69-1	Aroclor-1254	24	JP
11096-82-5	Aroclor-1260	55	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X208RE

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344853RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1101BK09

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 42 Date Analyzed: 11/01/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	17	U
74-83-9	Bromomethane	17	U
75-01-4	Vinyl Chloride	17	U
75-00-3	Chloroethane	17	U
75-09-2	Methylene Chloride	17 ~~B~~	~~B~~ U am
67-64-1	Acetone	17	UJ
75-15-0	Carbon Disulfide	17	U
75-35-4	1,1-Dichloroethene	17	U
75-34-3	1,1-Dichloroethane	17	U
540-59-0	1,2-Dichloroethene (total)	17	U
107-06-2	1,2-Dichloroethane	17	U
78-93-3	2-Butanone	17	UJ
71-55-6	1,1,1-Trichloroethane	8	J
56-23-5	Carbon Tetrachloride	17	UJ
75-27-4	Bromodichloromethane	17	UJ
78-87-5	1,2-Dichloropropane	17	UJ
10061-01-5	cis-1,3-Dichloropropene	17	UJ
79-01-6	Trichloroethene	17	UJ
124-48-1	Dibromochloromethane	17	UJ
79-00-5	1,1,2-Trichloroethane	17	UJ
71-43-2	Benzene	17	UJ
10061-02-6	trans-1,3-Dichloropropene	17	UJ
75-25-2	Bromoform	17	UJ
108-10-1	4-Methyl-2-Pentanone	17	UJ
591-78-6	2-Hexanone	17	UJ
127-18-4	Tetrachloroethene	17	UJ
79-34-5	1,1,2,2-Tetrachloroethane	17	UJ
108-88-3	Toluene	17	UJ
108-90-7	Chlorobenzene	17	UJ
100-41-4	Ethylbenzene	17	UJ
100-42-5	Styrene	17	UJ
1330-20-7	Xylene (total)	17	UJ

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X208RE

Lab Name: ILLINOIS EPA Contract: 1358070001

Lab Code: SPFLD Case No.: EAGLE SAS No.: _____ SDG No.: 344846

Matrix: (soil/water) SOIL Lab Sample ID: D344853RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C1101BK09

Level: (low/med) LOW Date Received: 10/27/93

% Moisture: not dec. 42 Date Analyzed: 11/01/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X101

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316968
Level (Low/Med): Date Received: 10/28/93
% Solids: 69.3

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	12400			P	
7440-36-0	Antimony	8.9	U	N	P	J
7440-38-2	Arsenic	5.8		S	FM	
7440-39-3	Barium	230			P	
7440-41-7	Beryllium	0.80	B		P	
7440-43-9	Cadmium	0.59	U		P	
7440-70-2	Calcium	10600			P	
7440-47-3	Chromium	16.2			P	
7440-48-4	Cobalt	4.1	B		P	
7440-50-8	Copper	20.0		N	P	J
7439-89-6	Iron	14700			P	
7439-92-1	Lead	148			P	
7439-95-4	Magnesium	2370			P	
7439-96-5	Manganese	434			P	
7439-97-6	Mercury	0.17			AV	
7440-02-2	Nickel	13.5			P	
7440-09-7	Potassium	1890			P	
7782-49-2	Selenium	1.39	U		FM	
7440-22-4	Silver	0.99	U		P	
7440-23-5	Sodium	106	B		P	
7440-28-0	Thallium	0.33	B	W,N	FM	J
7440-62-2	Vanadium	28.5			P	
7440-66-6	Zinc	136			P	
	Cyanide	1.2	U		AS	
					AS	

Color Before: Black Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X102

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316969
Level (Low/Med): Date Received: 10/28/93
% Solids: 73.6

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	10000			P	
7440-36-0	Antimony	9.2	U	N	P	J
7440-38-2	Arsenic	5.7		S	FM	
7440-39-3	Barium	265			P	
7440-41-7	Beryllium	0.81	B		P	
7440-43-9	Cadmium	0.61	U		P	
7440-70-2	Calcium	9880			P	
7440-47-3	Chromium	14.4			P	
7440-48-4	Cobalt	6.5	B		P	
7440-50-8	Copper	19.7		N	P	J
7439-89-6	Iron	14400			P	
7439-92-1	Lead	236			P	
7439-95-4	Magnesium	2090			P	
7439-96-5	Manganese	686			P	
7439-97-6	Mercury	0.18			AV	
7440-02-2	Nickel	11.5			P	
7440-09-7	Potassium	1600			P	
7782-49-2	Selenium	1.3	U	W	FM	J
7440-22-4	Silver	1.0	U		P	
7440-23-5	Sodium	87.9	B		P	
7440-28-0	Thallium	0.34	B	W,N	FM	J
7440-62-2	Vanadium	27.1			P	
7440-66-6	Zinc	138			P	
	Cyanide	1.1	U		AS	
					AS	

Color Before: Black Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X103

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316958
Level (Low/Med): Date Received: 10/28/93
% Solids: 64.7

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	14900			P	
7440-36-0	Antimony	13.9	U	N	P	J
7440-38-2	Arsenic	5.0			FM	
7440-39-3	Barium	112			P	
7440-41-7	Beryllium	0.68	B		P	
7440-43-9	Cadmium	3.2			P	
7440-70-2	Calcium	2010			P	
7440-47-3	Chromium	15.9			P	
7440-48-4	Cobalt	12.0	B		P	
7440-50-8	Copper	201		N	P	J
7439-89-6	Iron	13900			P	
7439-92-1	Lead	260			P	
7439-95-4	Magnesium	1970			P	
7439-96-5	Manganese	915			P	
7439-97-6	Mercury	0.07	U		AV	
7440-02-2	Nickel	20.0			P	
7440-09-7	Potassium	1120	B		P	
7782-49-2	Selenium	0.31	U	W	FM	J
7440-22-4	Silver	1.5	U		P	
7440-23-5	Sodium	47.8	B		P	
7440-28-0	Thallium	0.31	U	W,N	FM	J
7440-62-2	Vanadium	28.2			P	
7440-66-6	Zinc	5580			P	
	Cyanide	1.3	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X104

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316959
Level (Low/Med): Date Received: 10/28/93
% Solids: 82.7

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	6880			P	
7440-36-0	Antimony	10.6	U	N	P	J
7440-38-2	Arsenic	6.6			FM	
7440-39-3	Barium	181			P	
7440-41-7	Beryllium	0.49	B		P	
7440-43-9	Cadmium	3.2			P	
7440-70-2	Calcium	598	B		P	
7440-47-3	Chromium	10.3			P	
7440-48-4	Cobalt	13.7			P	
7440-50-8	Copper	30.6		N	P	J
7439-89-6	Iron	11500			P	
7439-92-1	Lead	61			P	
7439-95-4	Magnesium	1040	B		P	
7439-96-5	Manganese	1180			P	
7439-97-6	Mercury	0.05	U		AV	
7440-02-2	Nickel	27.1			P	
7440-09-7	Potassium	491	B		P	J
7782-49-2	Selenium	0.27	B	W	FM	J
7440-22-4	Silver	1.2	U		P	
7440-23-5	Sodium	47.5	B		P	
7440-28-0	Thallium	1.2	U	N	FM	J
7440-62-2	Vanadium	27.5			P	
7440-66-6	Zinc	4770			P	
	Cyanide	1.0	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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EPA SAMPLE NO.

X105

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316960
Level (Low/Med): Date Received: 10/28/93
% Solids: 82.7

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	7430			P	
7440-36-0	Antimony	11.4		N	P	J
7440-38-2	Arsenic	86.3			FM	
7440-39-3	Barium	379			P	
7440-41-7	Beryllium	0.83	B		P	
7440-43-9	Cadmium	47.2			P	
7440-70-2	Calcium	1930			P	
7440-47-3	Chromium	22.6			P	
7440-48-4	Cobalt	20.1			P	
7440-50-8	Copper	911		N	P	J
7439-89-6	Iron	104000			P	
7439-92-1	Lead	5760			P	
7439-95-4	Magnesium	1630			P	
7439-96-5	Manganese	178			P	
7439-97-6	Mercury	0.05	U		AV	
7440-02-2	Nickel	55.9			P	
7440-09-7	Potassium	300	B		P	J
7782-49-2	Selenium	1.3		S	FM	
7440-22-4	Silver	6.3			P	
7440-23-5	Sodium	39.6	B		P	
7440-28-0	Thallium	1.3	U	E,N	FM	J
7440-62-2	Vanadium	22.6			P	
7440-66-6	Zinc	31700			P	
	Cyanide	1.0	U		AS	
					AS	

Color Before: Black Clarity Before: Opaque Texture: Fine
Color After: Yellow Clarity After: Clear Artifacts:
Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X106

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316970
Level (Low/Med): Date Received: 10/28/93
% Solids: 75.4

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	13000			P	
7440-36-0	Antimony	9.4	U	N	P	J
7440-38-2	Arsenic	6.2		S	FM	
7440-39-3	Barium	224			P	
7440-41-7	Beryllium	0.63	B		P	
7440-43-9	Cadmium	0.89	B		P	
7440-70-2	Calcium	11600			P	
7440-47-3	Chromium	15.1			P	
7440-48-4	Cobalt	11.1			P	
7440-50-8	Copper	24.7		N	P	J
7439-89-6	Iron	15400			P	
7439-92-1	Lead	28.5		S	FM	
7439-95-4	Magnesium	2150			P	
7439-96-5	Manganese	922			P	
7439-97-6	Mercury	0.06	U		AV	
7440-02-2	Nickel	14.0			P	
7440-09-7	Potassium	1060			P	J
7782-49-2	Selenium	1.3	U		FM	
7440-22-4	Silver	1.0	U		P	
7440-23-5	Sodium	37.4	B		P	
7440-28-0	Thallium	0.26	B	W,N	FM	J
7440-62-2	Vanadium	28.5			P	
7440-66-6	Zinc	1490			P	
	Cyanide	1.1	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X107

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316971
Level (Low/Med): Date Received: 10/28/93
% Solids: 61.6

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	13000			P	
7440-36-0	Antimony	10.5	U	N	P	J
7440-38-2	Arsenic	8.7		S	FM	
7440-39-3	Barium	124			P	
7440-41-7	Beryllium	0.72	B		P	
7440-43-9	Cadmium	3.5			P	
7440-70-2	Calcium	5360			P	
7440-47-3	Chromium	16.1			P	
7440-48-4	Cobalt	5.6	~~U~~ B		P	
7440-50-8	Copper	36.4		N	P	J
7439-89-6	Iron	14900			P	
7439-92-1	Lead	105			P	
7439-95-4	Magnesium	2090			P	
7439-96-5	Manganese	600			P	
7439-97-6	Mercury	0.16			AV	
7440-02-2	Nickel	15.9			P	
7440-09-7	Potassium	1160	B		P	J
7782-49-2	Selenium	1.8	U		FM	
7440-22-4	Silver	1.2	U		P	
7440-23-5	Sodium	71.8	B		P	
7440-28-0	Thallium	0.35	U	W,N	FM	J
7440-62-2	Vanadium	27.3			P	
7440-66-6	Zinc	2480			P	
	Cyanide	1.4	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X108

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316972
Level (Low/Med): Date Received: 10/28/93
% Solids: 69.2

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	11500			P	
7440-36-0	Antimony	13.0	U	N	P	J
7440-38-2	Arsenic	13.4			FM	
7440-39-3	Barium	267			P	
7440-41-7	Beryllium	1.0	B		P	
7440-43-9	Cadmium	11.3			P	
7440-70-2	Calcium	5430			P	
7440-47-3	Chromium	23.4			P	
7440-48-4	Cobalt	14.8			P	
7440-50-8	Copper	104			P	
7439-89-6	Iron	33900			P	
7439-92-1	Lead	388			P	
7439-95-4	Magnesium	1630			P	
7439-96-5	Manganese	1670			P	
7439-97-6	Mercury	0.16			AV	
7440-02-2	Nickel	35.1			P	
7440-09-7	Potassium	1260	U		P	
7782-49-2	Selenium	0.84	B	W	FM	J
7440-22-4	Silver	1.4	U		P	
7440-23-5	Sodium	178	B		P	
7440-28-0	Thallium	1.4	U	W	FM	J
7440-62-2	Vanadium	37.7			P	
7440-66-6	Zinc	2280			P	
	Cyanide	1.2	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Yellow Clarity After: Clear Artifacts:
Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X109

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316973
Level (Low/Med): Date Received: 10/28/93
% Solids: 65.5

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	10200			P	
7440-36-0	Antimony	9.3	U	N	P	J
7440-38-2	Arsenic	4.6			FM	
7440-39-3	Barium	130			P	
7440-41-7	Beryllium	0.60	B		P	
7440-43-9	Cadmium	0.71	B		P	
7440-70-2	Calcium	2580			P	
7440-47-3	Chromium	13.4			P	
7440-48-4	Cobalt	6.9	B		P	
7440-50-8	Copper	15.3			P	
7439-89-6	Iron	12600			P	
7439-92-1	Lead	47.0			P	
7439-95-4	Magnesium	1530			P	
7439-96-5	Manganese	660			P	
7439-97-6	Mercury	0.11	B		AV	
7440-02-2	Nickel	11.0			P	
7440-09-7	Potassium	1650			P	
7782-49-2	Selenium	0.31	B	W	FM	J
7440-22-4	Silver	1.0	U		P	
7440-23-5	Sodium	65.7	B		P	
7440-28-0	Thallium	0.28	U	W	FM	J
7440-62-2	Vanadium	24.7			P	
7440-66-6	Zinc	360			P	
	Cyanide	1.3	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X110

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316974
Level (Low/Med): Date Received: 10/28/93
% Solids: 79.6

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	15000			P	
7440-36-0	Antimony	7.9	U	N	P	J
7440-38-2	Arsenic	13.6			FM	
7440-39-3	Barium	150			P	
7440-41-7	Beryllium	0.78	B		P	
7440-43-9	Cadmium	2.0			P	
7440-70-2	Calcium	3450			P	
7440-47-3	Chromium	20.7			P	
7440-48-4	Cobalt	8.5	B		P	
7440-50-8	Copper	22.5			P	
7439-89-6	Iron	20700			P	
7439-92-1	Lead	87.6			P	
7439-95-4	Magnesium	2500			P	
7439-96-5	Manganese	563			P	
7439-97-6	Mercury	0.06	U		AV	
7440-02-2	Nickel	15.9			P	
7440-09-7	Potassium	1980			P	
7782-49-2	Selenium	0.49	B	W	FM	J
7440-22-4	Silver	0.88	U		P	
7440-23-5	Sodium	62.8	B		P	
7440-28-0	Thallium	1.6	U		FM	
7440-62-2	Vanadium	38.7			P	
7440-66-6	Zinc	606			P	
	Cyanide	1.0	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X111

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316975
Level (Low/Med): Date Received: 10/28/93
% Solids: 80.5

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	13500			P	
7440-36-0	Antimony	9.0	U	N	P	J
7440-38-2	Arsenic	8.5			FM	
7440-39-3	Barium	193			P	
7440-41-7	Beryllium	0.94	B		P	
7440-43-9	Cadmium	1.6			P	
7440-70-2	Calcium	8380			P	
7440-47-3	Chromium	20.2			P	
7440-48-4	Cobalt	7.8	B		P	
7440-50-8	Copper	33.8			P	
7439-89-6	Iron	19600			P	
7439-92-1	Lead	70.8			P	
7439-95-4	Magnesium	1950			P	
7439-96-5	Manganese	491			P	
7439-97-6	Mercury	0.11	B		AV	
7440-02-2	Nickel	16.5			P	
7440-09-7	Potassium	1920			P	
7782-49-2	Selenium	0.42	B	W	FM	J
7440-22-4	Silver	1.0	U		P	
7440-23-5	Sodium	120	B		P	
7440-28-0	Thallium	0.25	U	W	FM	J
7440-62-2	Vanadium	34.2			P	
7440-66-6	Zinc	488			P	
	Cyanide	1.0	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X112

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316976
Level (Low/Med): Date Received: 10/28/93
% Solids: 77.4

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	9950			P	
7440-36-0	Antimony	10.2	U	N	P	J
7440-38-2	Arsenic	6.2			FM	
7440-39-3	Barium	233			P	
7440-41-7	Beryllium	0.85	B		P	
7440-43-9	Cadmium	2.8			P	
7440-70-2	Calcium	2800			P	
7440-47-3	Chromium	14.8			P	
7440-48-4	Cobalt	11.3	B		P	
7440-50-8	Copper	15.9			P	
7439-89-6	Iron	13900			P	
7439-92-1	Lead	70.1			P	
7439-95-4	Magnesium	1760			P	
7439-96-5	Manganese	2070			P	
7439-97-6	Mercury	0.11	B		AV	
7440-02-2	Nickel	22.9			P	
7440-09-7	Potassium	1970			P	
7782-49-2	Selenium	0.39	B	W	FM	J
7440-22-4	Silver	1.1	U		P	
7440-23-5	Sodium	52.4	B		P	
7440-28-0	Thallium	0.28	U	W	FM	J
7440-62-2	Vanadium	28.2			P	
7440-66-6	Zinc	489			P	
	Cyanide	1.1	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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EPA SAMPLE NO.

X113

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316977
Level (Low/Med): Date Received: 10/28/93
% Solids: 78.4

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	16600			P	
7440-36-0	Antimony	7.8	U	N	P	J
7440-38-2	Arsenic	5.6			FM	
7440-39-3	Barium	116			P	
7440-41-7	Beryllium	0.85	B		P	
7440-43-9	Cadmium	0.68	B		P	
7440-70-2	Calcium	5940			P	
7440-47-3	Chromium	21.7			P	
7440-48-4	Cobalt	10.6			P	
7440-50-8	Copper	22.5			P	
7439-89-6	Iron	20400			P	
7439-92-1	Lead	75.1			P	
7439-95-4	Magnesium	4870			P	
7439-96-5	Manganese	568			P	
7439-97-6	Mercury	0.06	U		AV	
7440-02-2	Nickel	18.6			P	
7440-09-7	Potassium	2400			P	
7782-49-2	Selenium	0.27	B	W	FM	J
7440-22-4	Silver	0.87	U		P	
7440-23-5	Sodium	45.8			P	
7440-28-0	Thallium	0.27	U	W	FM	J
7440-62-2	Vanadium	33.7			P	
7440-66-6	Zinc	451			P	
	Cyanide	1.1	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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EPA SAMPLE NO.

X114

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316961
Level (Low/Med): Date Received: 10/28/93
% Solids: 78.7

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	9750			P	
7440-36-0	Antimony	8.4	U	N	P	J
7440-38-2	Arsenic	11.9			FM	
7440-39-3	Barium	183			P	
7440-41-7	Beryllium	1.0			P	
7440-43-9	Cadmium	2.9			P	
7440-70-2	Calcium	4230			P	
7440-47-3	Chromium	15.9			P	
7440-48-4	Cobalt	5.8	B		P	
7440-50-8	Copper	28.3		N	P	J
7439-89-6	Iron	28600			P	
7439-92-1	Lead	137			P	
7439-95-4	Magnesium	1130			P	
7439-96-5	Manganese	314			P	
7439-97-6	Mercury	0.06	U		AV	
7440-02-2	Nickel	14.4			P	
7440-09-7	Potassium	1040			P	
7782-49-2	Selenium	0.76	B	W	FM	J
7440-22-4	Silver	0.94	U		P	
7440-23-5	Sodium	293	B		P	
7440-28-0	Thallium	0.71	B	W,N	FM	J
7440-62-2	Vanadium	29.7			P	
7440-66-6	Zinc	1580			P	
	Cyanide	1.1	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Yellow Clarity After: Clear Artifacts:
Comments:

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EPA SAMPLE NO.

X115

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316962
Level (Low/Med): Date Received: 10/28/93
% Solids: 77.3

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	14800			P	
7440-36-0	Antimony	11.1	U	N	P	J
7440-38-2	Arsenic	10.5		S	FM	
7440-39-3	Barium	181			P	
7440-41-7	Beryllium	0.80	B		P	
7440-43-9	Cadmium	1.48			P	
7440-70-2	Calcium	4970			P	
7440-47-3	Chromium	19.4			P	
7440-48-4	Cobalt	7.0	B		P	
7440-50-8	Copper	27.8		N	P	J
7439-89-6	Iron	19700			P	
7439-92-1	Lead	76.2			P	
7439-95-4	Magnesium	2030			P	
7439-96-5	Manganese	538			P	
7439-97-6	Mercury	0.42			AV	
7440-02-2	Nickel	10.9			P	
7440-09-7	Potassium	1470			P	
7782-49-2	Selenium	0.52	U ~~R~~	W	FM	J
7440-22-4	Silver	1.2	U		P	
7440-23-5	Sodium	61.5	B		P	
7440-28-0	Thallium	0.57	B	W,N	FM	J
7440-62-2	Vanadium	34.8			P	
7440-66-6	Zinc	638			P	
	Cyanide	1.1	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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EPA SAMPLE NO.

X116

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316963
Level (Low/Med): Date Received: 10/28/93
% Solids: 75.8

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	12500			P	
7440-36-0	Antimony	9.9	U	N	P	J
7440-38-2	Arsenic	7.1			FM	
7440-39-3	Barium	227			P	
7440-41-7	Beryllium	0.93	B		P	
7440-43-9	Cadmium	2.3			P	
7440-70-2	Calcium	8430			P	
7440-47-3	Chromium	18.9			P	
7440-48-4	Cobalt	9.8	B		P	
7440-50-8	Copper	25.5		N	P	J
7439-89-6	Iron	18900			P	
7439-92-1	Lead	147			P	
7439-95-4	Magnesium	2020			P	
7439-96-5	Manganese	851			P	
7439-97-6	Mercury	0.24			AV	
7440-02-2	Nickel	16.5			P	
7440-09-7	Potassium	1750			P	
7782-49-2	Selenium	0.53	U	W	FM	J
7440-22-4	Silver	1.1	U		P	
7440-23-5	Sodium	89.9	B		P	
7440-28-0	Thallium	0.53	U	W,N	FM	J
7440-62-2	Vanadium	35.1			P	
7440-66-6	Zinc	998			P	
	Cyanide	1.1	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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EPA SAMPLE NO.

X117

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316964
Level (Low/Med): Date Received: 10/28/93
% Solids: 55.5

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	13800			P	
7440-36-0	Antimony	14.5	U	N	P	J
7440-38-2	Arsenic	8.5			FM	
7440-39-3	Barium	222			P	
7440-41-7	Beryllium	1.7			P	
7440-43-9	Cadmium	4.8			P	
7440-70-2	Calcium	19300			P	
7440-47-3	Chromium	17.3			P	
7440-48-4	Cobalt	10.6	B		P	
7440-50-8	Copper	57.2		N	P	J
7439-89-6	Iron	21100			P	
7439-92-1	Lead	186			P	
7439-95-4	Magnesium	2140			P	
7439-96-5	Manganese	995			P	
7439-97-6	Mercury	0.14	B		AV	
7440-02-2	Nickel	27.5			P	
7440-09-7	Potassium	1460	B		P	J
7782-49-2	Selenium	0.35	U	W	FM	J
7440-22-4	Silver	1.6	U		P	
7440-23-5	Sodium	1020	B		P	
7440-28-0	Thallium	0.35	U	W,N	FM	J
7440-62-2	Vanadium	34.3			P	
7440-66-6	Zinc	7420			P	
	Cyanide	1.5	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Yellow Clarity After: Clear Artifacts:
Comments:

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EPA SAMPLE NO.

X118

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316965
Level (Low/Med): Date Received: 10/28/93
% Solids: 74.4

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	14100			P	
7440-36-0	Antimony	10.9	U	~~S~~N	P	J
7440-38-2	Arsenic	5.9		N ~~S~~	FM	
7440-39-3	Barium	106			P	
7440-41-7	Beryllium	0.73	B		P	
7440-43-9	Cadmium	0.73	U		P	
7440-70-2	Calcium	1720			P	
7440-47-3	Chromium	18.5			P	
7440-48-4	Cobalt	11.1	B		P	
7440-50-8	Copper	15.9		N	P	J
7439-89-6	Iron	18200			P	
7439-92-1	Lead	30.4			FM	
7439-95-4	Magnesium	2120			P	
7439-96-5	Manganese	795			P	
7439-97-6	Mercury	0.06	U		AV	
7440-02-2	Nickel	12.8			P	
7440-09-7	Potassium	1210	B		P	J
7782-49-2	Selenium	0.27	U	W	FM	J
7440-22-4	Silver	1.2	U		P	
7440-23-5	Sodium	34.4	U		P	
7440-28-0	Thallium	0.27	U	W,N	FM	J
7440-62-2	Vanadium	34.5	B		P	
7440-66-6	Zinc	354			P	
	Cyanide	1.1	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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EPA SAMPLE NO.

X119

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316966
Level (Low/Med): Date Received: 10/28/93
% Solids: 79.2

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	9390			P	
7440-36-0	Antimony	8.3	U	N	P	J
7440-38-2	Arsenic	6.7			FM	
7440-39-3	Barium	196			P	
7440-41-7	Beryllium	0.60	B		P	
7440-43-9	Cadmium	2.8			P	
7440-70-2	Calcium	12100			P	
7440-47-3	Chromium	13.7			P	
7440-48-4	Cobalt	14.9			P	
7440-50-8	Copper	17.5		N	P	J
7439-89-6	Iron	14100			P	
7439-92-1	Lead	51.9			P	
7439-95-4	Magnesium	1790			P	
7439-96-5	Manganese	1520			P	
7439-97-6	Mercury	0.32			AV	
7440-02-2	Nickel	14.8			P	
7440-09-7	Potassium	1670			P	
7782-49-2	Selenium	0.55	B	W	FM	J
7440-22-4	Silver	0.92	U		P	
7440-23-5	Sodium	26.1	U		P	
7440-28-0	Thallium	0.50	U	N	FM	J
7440-62-2	Vanadium	26.7			P	
7440-66-6	Zinc	1570			P	
	Cyanide	1.0	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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EPA SAMPLE NO.

X120

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 96
Matrix (Soil): Lab Sample ID: B316967
Level (Low/Med): Date Received: 10/28/93
% Solids: 78.5

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	16300			P	
7440-36-0	Antimony	8.0	U	N	P	J
7440-38-2	Arsenic	10.7			FM	
7440-39-3	Barium	155			P	
7440-41-7	Beryllium	0.95			P	
7440-43-9	Cadmium	0.53	U		P	
7440-70-2	Calcium	2870			P	
7440-47-3	Chromium	20.4			P	
7440-48-4	Cobalt	7.4	B		P	
7440-50-8	Copper	17.2		N	P	J
7439-89-6	Iron	22900			P	
7439-92-1	Lead	~~64.9~~ 32.7		S	FM	
7439-95-4	Magnesium	2870			P	
7439-96-5	Manganese	889			P	
7439-97-6	Mercury	0.06	U		AV	
7440-02-2	Nickel	16.9			P	
7440-09-7	Potassium	1490			P	
7782-49-2	Selenium	0.38	B	W	FM	J
7440-22-4	Silver	0.89	U		P	
7440-23-5	Sodium	27.7	B		P	
7440-28-0	Thallium	0.25	U	W,N	FM	J
7440-62-2	Vanadium	39.0			P	
7440-66-6	Zinc	371			P	
	Cyanide	1.1	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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EPA SAMPLE NO.

X201

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316978
Level (Low/Med): Date Received: 10/28/93
% Solids: 69.3

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	6630			P	
7440-36-0	Antimony	9.0	U	N	P	J
7440-38-2	Arsenic	4.5			FM	
7440-39-3	Barium	79.5			P	
7440-41-7	Beryllium	0.42	B		P	
7440-43-9	Cadmium	0.69	B		P	
7440-70-2	Calcium	6360			P	
7440-47-3	Chromium	9.92			P	
7440-48-4	Cobalt	6.1	B		P	
7440-50-8	Copper	11.9			P	
7439-89-6	Iron	10100			P	
7439-92-1	Lead	46.4			P	
7439-95-4	Magnesium	2760			P	
7439-96-5	Manganese	501			P	
7439-97-6	Mercury	0.06	U		AV	
7440-02-2	Nickel	9.2	B		P	
7440-09-7	Potassium	782	U ~~B~~		P	
7782-49-2	Selenium	0.27	U	W	FM	J
7440-22-4	Silver	0.24			P	
7440-23-5	Sodium	73.3	B		P	
7440-28-0	Thallium	0.27	U	M CR	FM	J
7440-62-2	Vanadium	CR ~~1700~~ 17.90			P	
7440-66-6	Zinc	326			P	
	Cyanide	1.2	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X202

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316979
Level (Low/Med): Date Received: 10/28/93
% Solids: 67.3

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6390			P
7440-36-0	Antimony	10.4	U	N	P J
7440-38-2	Arsenic	4.3			FM
7440-39-3	Barium	70.4			P
7440-41-7	Beryllium	0.42	B		P
7440-43-9	Cadmium	0.70	U		P
7440-70-2	Calcium	5520			P
7440-47-3	Chromium	9.9			P
7440-48-4	Cobalt	4.9	B		P
7440-50-8	Copper	11.2			P
7439-89-6	Iron	9120			P
7439-92-1	Lead	~~30.0~~ 35.0		*	FM
7439-95-4	Magnesium	2390			P
7439-96-5	Manganese	384			P
7439-97-6	Mercury	0.07	U		AV
7440-02-2	Nickel	8.7	B		P
7440-09-7	Potassium	905	U		P
7782-49-2	Selenium	0.27	U	W	FM J
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	79.8	B		P
7440-28-0	Thallium	0.27	U		FM
7440-62-2	Vanadium	17.4			P
7440-66-6	Zinc	291			P
	Cyanide	1.2	U		AS
					AS

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Colorless Clarity After: Clear Artifacts:
Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316980
Level (Low/Med): Date Received: 10/28/93
% Solids: 59.3

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	7370			P	
7440-36-0	Antimony	10.3	U	N	P	J
7440-38-2	Arsenic	6.4			FM	
7440-39-3	Barium	99.9			P	
7440-41-7	Beryllium	0.50	B		P	
7440-43-9	Cadmium	8.6			P	
7440-70-2	Calcium	20300			P	
7440-47-3	Chromium	12.1			P	
7440-48-4	Cobalt	6.0	B		P	
7440-50-8	Copper	37.9			P	
7439-89-6	Iron	12400			P	
7439-92-1	Lead	101			P	
7439-95-4	Magnesium	3330			P	
7439-96-5	Manganese	722			P	
7439-97-6	Mercury	0.18			AV	
7440-02-2	Nickel	11.5			P	
7440-09-7	Potassium	957	U B		P	
7782-49-2	Selenium	0.33	U	W	FM	J
7440-22-4	Silver	1.1	U		P	
7440-23-5	Sodium	132	B		P	
7440-28-0	Thallium	0.33	U		FM	
7440-62-2	Vanadium	19.0			P	
7440-66-6	Zinc	2200			P	
	Cyanide	1.4	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Green Clarity After: Clear Artifacts:
Comments:

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X204

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316981
Level (Low/Med): Date Received: 10/28/93
% SolidS: 46.6

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	14900			P	
7440-36-0	Antimony	17.4	U	N	P	J
7440-38-2	Arsenic	10.9			FM	
7440-39-3	Barium	97.4			P	
7440-41-7	Beryllium	0.59	B		P	
7440-43-9	Cadmium	7.4			P	
7440-70-2	Calcium	12000			P	
7440-47-3	Chromium	13.2			P	
7440-48-4	Cobalt	8.1	B		P	
7440-50-8	Copper	41.9			P	
7439-89-6	Iron	14300			P	
7439-92-1	Lead	~~69.3~~ 72.6		*	FM	
7439-95-4	Magnesium	2960			P	
7439-96-5	Manganese	451			P	
7439-97-6	Mercury	0.11	B		AV	
7440-02-2	Nickel	14.7	B		P	
7440-09-7	Potassium	1010	~~B~~ U		P	
7782-49-2	Selenium	0.40	U	W	FM	J
7440-22-4	Silver	1.9	U		P	
7440-23-5	Sodium	150	B		P	
7440-28-0	Thallium	0.40	U	W	FM	J
7440-62-2	Vanadium	26.3			P	
7440-66-6	Zinc	3040			P	
	Cyanide	1.8	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Green Clarity After: Clear Artifacts:
Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X205

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316982
Level (Low/Med): Date Received: 10/28/93
% Solids: 73.8

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	8360			P	
7440-36-0	Antimony	9.3	U	N	P	J
7440-38-2	Arsenic	2.9			FM	
7440-39-3	Barium	89.6			P	
7440-41-7	Beryllium	0.52	B		P	
7440-43-9	Cadmium	1.8			P	
7440-70-2	Calcium	4680			P	
7440-47-3	Chromium	11.0			P	
7440-48-4	Cobalt	4.5	B		P	
7440-50-8	Copper	9.0			P	
7439-89-6	Iron	10900			P	
7439-92-1	Lead	CB ~~8.2~~ 10.2		*	FM	
7439-95-4	Magnesium	2620			P	
7439-96-5	Manganese	CB ~~8590~~ 95.9			P	
7439-97-6	Mercury	0.06	U		AV	
7440-02-2	Nickel	12.6			P	
7440-09-7	Potassium	1090	U		P	
7782-49-2	Selenium	0.31	B	W	FM	J
7440-22-4	Silver	1.0	U		P	
7440-23-5	Sodium	84.7	B		P	
7440-28-0	Thallium	0.26	U	W	FM	J
7440-62-2	Vanadium	20.8			P	
7440-66-6	Zinc	5690			P	
	Cyanide	1.1	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Green Clarity After: Clear Artifacts:
Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X206

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316983
Level (Low/Med): Date Received: 10/28/93
% Solids: 24.5

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	16300			P	
7440-36-0	Antimony	62.7		N	P	J
7440-38-2	Arsenic	19.4			FM	
7440-39-3	Barium	383			P	
7440-41-7	Beryllium	1.5	B		P	
7440-43-9	Cadmium	523			P	
7440-70-2	Calcium	8260			P	
7440-47-3	Chromium	28.6			P	
7440-48-4	Cobalt	353			P	
7440-50-8	Copper	1420			P	
7439-89-6	Iron	82400			P	
7439-92-1	Lead	932			P	
7439-95-4	Magnesium	4970			P	
7439-96-5	Manganese	3500			P	
7439-97-6	Mercury	0.65			AV	
7440-02-2	Nickel	583			P	
7440-09-7	Potassium	1880	~~B~~ U		P	
7782-49-2	Selenium	4.1		S	FM	
7440-22-4	Silver	14.1			P	
7440-23-5	Sodium	470	B		P	
7440-28-0	Thallium	3.8	U	E	FM	J
7440-62-2	Vanadium	52.9			P	
7440-66-6	Zinc	156000			P	
	Cyanide	3.4	U		AS	
					AS	

Color Before: Black Clarity Before: Opaque Texture: Fine
Color After: Orange Clarity After: Clear Artifacts:
Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X207

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316984
Level (Low/Med): Date Received: 10/28/93
% Solids: 74.7

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	10700			P	
7440-36-0	Antimony	10.7	U	N	P	J
7440-38-2	Arsenic	6.0			FM	
7440-39-3	Barium	167			P	
7440-41-7	Beryllium	0.72	B		P	
7440-43-9	Cadmium	11.1			P	
7440-70-2	Calcium	1510			P	
7440-47-3	Chromium	14.6			P	
7440-48-4	Cobalt	10.8	B		P	
7440-50-8	Copper	20.8			P	
7439-89-6	Iron	14900			P	
7439-92-1	Lead	76.0			P	
7439-95-4	Magnesium	1500			P	
7439-96-5	Manganese	1470			P	
7439-97-6	Mercury	0.06	U		AV	
7440-02-2	Nickel	11.9			P	
7440-09-7	Potassium	840	U B		P	
7782-49-2	Selenium	0.33	B	W	FM	J
7440-22-4	Silver	1.2	U		P	
7440-23-5	Sodium	82.0	B		P	
7440-28-0	Thallium	0.28	U	W	FM	J
7440-62-2	Vanadium	41.2			P	
7440-66-6	Zinc	2410			P	
	Cyanide	1.1	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Green Clarity After: Clear Artifacts:
Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X208

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: EAGLE ZINC CO
Lab Code: Case No.: SAS No.: SDG No.: 97
Matrix (Soil): Lab Sample ID: B316985
Level (Low/Med): Date Received: 10/28/93
% Solids: 57.5

Concentration Units (mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	9810			P	
7440-36-0	Antimony	10.8	U	N	P	J
7440-38-2	Arsenic	6.0			FM	
7440-39-3	Barium	92.5			P	
7440-41-7	Beryllium	0.59	B		P	
7440-43-9	Cadmium	19.6			P	
7440-70-2	Calcium	3020			P	
7440-47-3	Chromium	13.7			P	
7440-48-4	Cobalt	CB 4.7 ~~14.7~~			P	
7440-50-8	Copper	52.2			P	
7439-89-6	Iron	14500			P	
7439-92-1	Lead	125			P	
7439-95-4	Magnesium	1930			P	
7439-96-5	Manganese	461			P	
7439-97-6	Mercury	0.30			AV	
7440-02-2	Nickel	12.7			P	
7440-09-7	Potassium	835	U ~~B~~		P	
7782-49-2	Selenium	0.38	U	W	FM	J
7440-22-4	Silver	1.2	U		P	
7440-23-5	Sodium	110	B		P	
7440-28-0	Thallium	0.38	U	W	FM	J
7440-62-2	Vanadium	27.2			P	
7440-66-6	Zinc	3280			P	
	Cyanide	1.4	U		AS	
					AS	

Color Before: Brown Clarity Before: Opaque Texture: Fine
Color After: Green Clarity After: Clear Artifacts:
Comments:

IEPA DIVISION OF LABORATORIES
QUALITY ASSURANCE SECTION
INORGANIC DATA VALIDATION
CHECKLIST

Site:	Eagle Zinc Co.
Laboratory:	IEPA Champaign
SDG:	97
Analytical Protocol:	ILM03.0
Date:	December 29, 1993
Reviewer:	Chris Bridges
Reviewer Signature:	

I. PRELIMINARY REVIEW

Number Aqueous Samples: N/A Analytes:
Number Solid/Soil Samples: 14 Analytes: Trace Metals, Hg, CN

	YES	NO	N/A
A. Chain - of - Custody(ies) Present?	X		
Signed ?	X		
Dated?	X		
B. Cover Page- Present?	X		
Do sample numbers agree with sample numbers on:			
a. Chain - of - Custody Forms?	X		
b. Form 1s?	X		
C. Form 1- Final Data			
Are all Form 1s present and complete?	X		
Are correct units indicated on Form 1s (ug/l-waters & mg/kg-soils)	X		
Are soil sample results corrected for percent solids (dry weight)?	X		
Are sample results < IDL reported as the IDL (U)?	X		

ACTIONS:

NONE

II. HOLDING TIMES & PRESERVATION

Mercury (28 Days)	pH < 2	exceeded?		X	
Cyanide (14 Days)	pH > 12	exceeded?	X		
other Metals (6months)	pH < 2	exceeded?		X	

ACTIONS:

Cyanide holding time was exceeded. However no data was affected. Aqueous holding times were applied to the soil samples

III. CALIBRATIONS

A. Initial Calibration Procedures:

		YES	NO	N/A
Are acceptable 2 point calibrations present for:	ICP?	X		
Are acceptable 4 point calibrations present for:	AA?	X		
Correlation Coefficient > 0.995?		X		
	Cyanide?	X		
Correlation Coefficient > 0.995?		X		
Mid-Range standard distilled?		X		
Are acceptable 4 point calibrations present for:	Mercury?	X		
Correlation Coefficient > 0.995?		X		
Are acceptable calibrations present for other parameters?		X		

ACTIONS:

NONE

B. Form 2 - Initial and Continuing Calibration Verification:

	YES	NO	N/A
All necessary Form 2s present and complete?	X		
ICVs and CCVs analyzed at the correct frequency?		X	
Are results reported in the correct units (ug/l)?	X		
All calibration verification % Recoveries meet criteria?	X		

ACTIONS: (Analyte, % Recovery, Sample(s) affected and Qualifications)

Eleven cyanide samples were analyzed between CCVs however no data was affected

IV. BLANKS

	YES	NO	N/A
All necessary Form 3s present and complete?	X		
A. Initial and Continuing Calibration Blanks			
Analyzed at correct frequency?		X	
Are results reported in the correct units (ug/l)?	X		
Were transcription errors corrected?			X
All ICBs and CCBs meet no contamination criteria?		X	

ACTIONS: (ICB or CCB/IDL) Sample(s) affected, qualifications

Eleven cyanide samples were analyzed between CCBs however no data was affected

K (1070, 1330, 1510/945) X108, X201, X202, X203, X204, X205, X206, X207, X208 are qualified (U)

Contamination noted in Al, Cu, Fe, and V however no data was affected

B. Preparation Blanks

	YES	NO	N/A
Was one preparation blank prepared for:			
each 20 samples?	X		
each batch?	X		
each matrix type?			X
Were prep blanks analyzed at the correct frequency?	X		
Were prep blanks reported in the correct concentration units?	X		
Were all transcription errors corrected?			X
All prep blanks meet no contamination criteria?		X	

ACTIONS: (Analyte, (PB/IDL), Sample(s) affected, Qualifications)

Contamination noted in Cu and K however, the prep blank was qualified by a calibration blank,therefore no data can be qualified on the basis of the prep blank

Contamination noted in Al, Cu, Fe, Mn, and V however no data was affected

V. ICP INTERFERENCE CHECK SAMPLE:

	YES	NO	N/A
Form 4 present and complete?	X		
Were ICS ran at the correct frequency?	X		
Were all transcription errors corrected?			X
All % Recoveries of ICSAB Solution +/- 20 % of True Value?	X		
For elements not present in ICSA, is the absolute value of the ICSA result greater than the IDL?	X		

ACTIONS: (Analyte, % Recovery, Sample(s) affected, Qualifications)

The results for Co, Ni, V, and Mn were all greater than their respective IDLs however no data was affected

VI. SPIKE SAMPLE RECOVERY:

Form 5 present and complete for:	each 20 samples?	X		
	each matrix type?			X
Were all transcription errors corrected?				X
Were field blanks used for spike sample analysis?			X	
Were all Matrix Spike % Recoveries within criteria?			X	

ACTIONS: (Analyte, % Recovery, Sample(s) affected, Qualifications)

Sb (46.9%R) X206 is qualified as estimated (J); X108, X109, X110, X111, X112, X113, X201, X202, X203, X204, X205, X206, X207, X208 is qualified as estimated (UJ)

Pb by GFAA (175.1 %R) the sample result was > 4X the spike added so no recovery limits apply

VII. DUPLICATE SAMPLE ANALYSIS:

		YES	NO	N/A
Form 6 present and complete for:	each 20 samples?	X		
	each matrix type?			X
Were all transcription errors corrected?				X
Were field blanks used for duplicate analysis?			X	
For both AA and ICP when both are used for the same analyte?		X		
Were all duplicate analyses differences within criteria?		X		

ACTIONS: (Element, Differences, Sample(s) affected, Qualifications)

NONE

VIII. LABORATORY CONTROL SAMPLE:

(Note: LCS not required for aqueous Hg.)

	YES	NO	N/A
Form 7 Present and Complete?	X		
Was one LCS prepared and analyzed for:			
every 20 or fewer water samples?			X
every digestion batch of water samples?			X
every 20 or fewer solid samples?	X		
every digestion batch of solid samples?	X		
Were all transcription errors corrected?	X		
Were all of the Aqueous LCS % Recoveries within criteria?			X
Were all of the Solid LCS % Recoveries within criteria?	X		

ACTIONS: (Element, % Recovery, Sample(s) affected, Qualifications)

NONE

IX. FURNACE ATOMIC ABSORPTION (AA) QC:

	YES	NO	N/A
Did the laboratory utilize duplicate injections for all non-MSAanalyses?	X		
Does the GFAA fow chart appear to have been followed for all analyses?	X		
Did the laboratory properly flag the GFAA results on the Form 1s?	X		

ACTIONS: (Analyte, Sample(s) affected, Qualifications)

Results flagged 'W', 'E', or 'M' by the laboratory are qualified as estimated (J)

X. ICP SERIAL DILUTION:

Form 9 present and complete?	X		
Was Serial Dilution analysis performed for:			
each 20 or fewer samples	X		
each matrix type?			X
Were all transcription errors corrected?			X
Were all serial dilution results within criteria?	X		
Were field blanks used for serial dilution analysis?		X	

ACTIONS: (Analyte, Sample(s) affected, Qualifications)

NONE

XI. RAW DATA:

	YES	NO	N/A
Digestion Log for flame AA/ICP present?	X		
Digestion Log for furnace AA present?			X
Digestion Log for mercury present?	X		
Digestion Log for cyanide present?	X		
Inventory Sheet present?	X		
Weights, dilutions, and volumes used to obtain values present?	X		
Percent solids calculation present for soils (sediments)?	X		
Are preparation dates present on Digestion Logs?	X		
Are standards preparation logs present and dated?	X		
Measurement read out records present for:			
ICP?	X		
Flame AA?			X
Furnace AA?	X		
Mercury?	X		
Cyanide?	X		
other Inorganics?			X
Are all results with the ICP linear ranges?	X		
Are all Mercury results within the calibrated range?	X		
Are all Cyanide results within the calibrated range?	X		
Are all other inorganics within the calibrated range?			X
Sulfate, Sulfide, _____			
Are all raw data to support all sample analyses an QC operations present?	X		
Legible?	X		
Properly labeled?	X		
Are the Instrument Detection Limits (IDLs) less than 3 months old?	X		
Are the ICP Linear Ranges less than three months old?	X		
Are the ICP Interelement correction factors less than one year old?	X		

ACTIONS:

NONE

IEPA DIVISION OF LABORATORIES
QUALITY ASSURANCE SECTION
INORGANIC DATA VALIDATION
CHECKLIST

Site:	Eagle Zinc (1 of 2)
Laboratory:	IEPA Champaign
SDG:	96
Analytical Protocol:	ILMO3.0
Date:	December 21, 1993
Reviewer:	Chris Bridges
Reviewer Signature:	Chris Bridges

I. PRELIMINARY REVIEW

Number Aqueous Samples: N/A Analytes:
Number Solid/Soil Samples: 14 Analytes: Trace Metals, Hg, CN

	YES	NO	N/A
A. Chain - of - Custody(ies) Present?	X		
Signed ?	X		
Dated?	X		
B. Cover Page- Present?	X		
Do sample numbers agree with sample numbers on:			
a. Chain - of - Custody Forms?	X		
b. Form 1s?	X		
C. Form 1- Final Data			
Are all Form 1s present and complete?	X		
Are correct units indicated on Form 1s (ug/l-waters & mg/kg-soils)	X		
Are soil sample results corrected for percent solids (dry weight)?	X		
Are sample results < IDL reported as the IDL (U)?	X		
D. Data Package received within the required turn around time?		X	

ACTIONS:

NONE

II. HOLDING TIMES & PRESERVATION

Mercury (28 Days)	pH < 2	exceeded?		X	
Cyanide (14 Days)	pH > 12	exceeded?	X		
other Metals (6months)	pH < 2	exceeded?		X	
Contactual Holding Times?		exceeded?	X		

ACTIONS:

Cyanides technical holding time exceeded by 4 days however, no data is affected.

III. CALIBRATIONS

A. Initial Calibration Procedures:

		YES	NO	N/A
Are acceptable 2 point calibrations present for:	ICP?	X		
Are acceptable 4 point calibrations present for:	AA?	X		
Correlation Coefficient > 0.995?		X		
	Cyanide?	X		
Correlation Coefficient > 0.995?		X		
Mid-Range standard distilled?		X		
Are acceptable 4 point calibrations present for:	Mercury?	X		
Correlation Coefficient > 0.995?		X		
Are acceptable calibrations present for other parameters?		X		

ACTIONS:

NONE

B. Form 2 - Initial and Continuing Calibration Verification:

All necessary Form 2s present and complete?	X		
ICVs and CCVs analyzed at the correct frequency?	X		
Are results reported in the correct units (ug/l)?	X		
All calibration verification % Recoveries meet criteria?	X		

ACTIONS: (Analyte, % Recovery, Sample(s) affected and Qualifications)

NONE

IV. BLANKS

	YES	NO	N/A
All necessary Form 3s present and complete?	X		
A. Initial and Continuing Calibration Blanks			
Analyzed at correct frequency?	X		
Are results reported in the correct units (ug/l)?	X		
Were transcription errors corrected?			X
All ICBs and CCBs meet no contamination criteria?		X	

ACTIONS: (ICB or CCB/IDL) Sample(s) affected, qualifications

K (-1020/945) X104, X105, X117, X118, X106, X107 are qualified as estimated (J)

Contamination noted in As, Al, and Cu however no data was affected

B. Preparation Blanks

	YES	NO	N/A
Was one preparation blank prepared for:			
each 20 samples?	X		
each batch?	X		
each matrix type?			X
Were prep blanks analyzed at the correct frequency?	X		
Were prep blanks reported in the correct concentration units?	X		
Were all transcription errors corrected?			X
All prep blanks meet no contamination criteria?	X		

ACTIONS: (Analyte, (PB/IDL), Sample(s) affected, Qualifications)

NONE

V. ICP INTERFERENCE CHECK SAMPLE:

	YES	NO	N/A
Form 4 present and complete?	X		
Were ICS ran at the correct frequency?	X		
Were all transcription errors corrected?			X
All % Recoveries of ICSAB Solution +/- 20 % of True Value?	X		
For elements not present in ICSA, is the absolute value of the ICSA result greater than the IDL?	X		

ACTIONS: (Analyte, % Recovery, Sample(s) affected, Qualifications)

The results for Cr, Cu, Mn, and Zn all exceeded their respective IDLs however no data was affected

VI. SPIKE SAMPLE RECOVERY:

		YES	NO	N/A
Form 5 present and complete for:	each 20 samples?	X		
	each matrix type?	X		
Were all transcription errors corrected?				X
Were field blanks used for spike sample analysis?			X	
Were all Matrix Spike % Recoveries within criteria?			X	

ACTIONS: (Analyte, % Recovery, Sample(s) affected, Qualifications)

Sb (31.4 %R) X105 is qualified as estimated (J); X103, X104, X114, X115, X116, X117, X118, X119 X120, X101, X102, X106, X107 are qualified as estimated (UJ)

Cu (126.9 %R) X103, X104, X105, X114, X115, X116, X117, X118, X119, X120, X101, X102, X106, X107 are qualified as estimated (J)

Tl (71.6 %R) X103, X104, X105, X116, X117, X118, X119, X120, X107 are qualified as estimated (UJ) X101, X102, X106, X114, X115 are qualified as estimated (J)

VII. DUPLICATE SAMPLE ANALYSIS:

		YES	NO	N/A
Form 6 present and complete for:	each 20 samples?	X		
	each matrix type?			X
Were all transcription errors corrected?				X
Were field blanks used for duplicate analysis?			X	
For both AA and ICP when both are used for the same analyte?		X		
Were all duplicate analyses differences within criteria?		X		

ACTIONS: (Element, Differences, Sample(s) affected, Qualifications)

NONE

VIII. LABORATORY CONTROL SAMPLE:

(Note: LCS not required for aqueous Hg.)

	YES	NO	N/A
Form 7 Present and Complete?	X		
Was one LCS prepared and analyzed for:			
every 20 or fewer water samples?			X
every digestion batch of water samples?			X
every 20 or fewer solid samples?	X		
every digestion batch of solid samples?	X		
Were all transcription errors corrected?			X
Were all of the Aqueous LCS % Recoveries within criteria?			X
Were all of the Solid LCS % Recoveries within criteria?	X		

ACTIONS: (Element, % Recovery, Sample(s) affected, Qualifications)

NONE

IX. FURNACE ATOMIC ABSORPTION (AA) QC:

	YES	NO	N/A
Did the laboratory utilize duplicate injections for all non-MSAanalyses?	X		
Does the GFAA fow chart appear to have been followed for all analyses?	X		
Did the laboratory properly flag the GFAA results on the Form 1s?	X		

ACTIONS: (Analyte, Sample(s) affected, Qualifications)

Any result flagged 'W' or 'E' by the laboratory is qualified as estimated (J)

X. ICP SERIAL DILUTION:

Form 9 present and complete?	X		
Was Serial Dilution analysis performed for:			
each 20 or fewer samples	X		
each matrix type?			X
Were all transcription errors corrected?			X
Were all serial dilution results within criteria?	X		
Were field blanks used for serial dilution analysis?		X	

ACTIONS: (Analyte, Sample(s) affected, Qualifications)

NONE

XI. RAW DATA:

	YES	NO	N/A
Digestion Log for flame AA/ICP present?	X		
Digestion Log for furnace AA present?	X		
Digestion Log for mercury present?	X		
Digestion Log for cyanide present?	X		
Inventory Sheet present?	X		
Weights, dilutions, and volumes used to obtain values present?	X		
Percent solids calculation present for soils (sediments)?	X		
Are preparation dates present on Digestion Logs?	X		
Are standards preparation logs present and dated?	X		
Measurement read out records present for:			
ICP?	X		
Flame AA?			X
Furnace AA?	X		
Mercury?	X		
Cyanide?	X		
other Inorganics?			X
Are all results with the ICP linear ranges?	X		
Are all Mercury results within the calibrated range?	X		
Are all Cyanide results within the calibrated range?	X		
Are all other inorganics within the calibrated range?			X
Sulfate, Sulfide, _____			
Are all raw data to support all sample analyses an QC operations present?	X		
Legible?	X		
Properly labeled?	X		
Are the Instrument Detection Limits (IDLs) less than 3 months old?	X		
Are the ICP Linear Ranges less than three months old?	X		
Are the ICP Interelement correction factors less than one year old?	X		

ACTIONS: NONE

Data Validation Checklist
Site Name: Eagle Zinc Co
SDG No.: 344846
Laboratory: IEPA

PRELIMINARY REVIEW

1. ***Chain-of-Custody***

	YES	NO	
a.	[X]	[ ]	Check chain-of-custody documentation for date/time sampled, date/time received in laboratory.
b.	[X]	[ ]	Check chain-of-custody documentation for proper documentation of transfers and signoffs.
c.	[X]	[ ]	Check chain-of-custody documentation for any inconsistencies or anomalies.

Comments: None.

2. ***Case Narrative***

	YES	NO	
a.	[X]	[ ]	Review entire case narrative.
b.	[X]	[ ]	Check case narrative for completeness.
c.	[X]	[ ]	Check for proper authorization signature.

Comments: None.

Data Validation Checklist
Site Name: Eagle Zinc Co
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Laboratory: IEPA
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I. Holding Times

YES NO
[X] [ ] Check that all technical and/or contractual holding times were met, as required, for all fractions.

EPA Number	Lab Number	Date Coll.	Date Rec'd.	VOA Date Anal.	Semi-VOA Date Extr	Semi-VOA Date Anal.	Pesticide Date Extr	Pesticide Date Anal.
X201	-846	10/26/93	10/27/93	10/29/93	10/28/93	11/3/93	10/28/93	11/4/93
X202	-847	↓	↓	↓	↓	11/3	↓	↓
X203	-848	↓	↓	↓	↓	11/3	↓	↓
X204	-849	↓	↓	↓	↓	11/3	↓	↓
X205	-850	↓	↓	↓	↓	11/3	↓	↓
X206	-851	↓	↓	↓	↓	11/2	↓	↓
X207	-852	↓	↓	↓	↓	11/3	↓	↓
X208	-853	↓	↓	↓	↓	11/2	↓	↓
X203RE				11/01/93				
X204RE				↓				
X205RE				↓				
X206RE				↓				
X207RE				↓				
X208RE				↓				

List below all samples (by sample number and fraction) qualified due to holding times.

All holding times met.

Data Validation Checklist
Site Name: Eagle Zinc Co.
SDG
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Laboratory: IEPA
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II. GC/MS Instrument Performance Check

Fraction: (VOA) SemiVOA (*circle one*)

1. *Evaluate Forms V and Raw Data*

	YES	NO	
a.	[X]	[ ]	Check that Forms V are present and completed for each 12 hour time period.
b.	[X]	[ ]	Check for transcription errors between raw data and Forms V.
c.	[X]	[ ]	Check that the appropriate number of significant figures has been reported and that rounding errors have not occurred.
d.	[X]	[ ]	Check for calculation errors.

2. *Verify Raw Data Format*

YES	NO	
[X]	[ ]	Check mass spectral listing to determine that the mass assignment is correct and that the mass listing is normalize to the specified ion (m/z 95 for VOA, m/z 198 for SemiVOA).

3. *Verify Ion Abundance Criteria*

YES	NO	
[X]	[ ]	Check that all ion abundance criteria has been met.

4. *Verify Background Correction*

YES	NO	
[X]	[ ]	Check that tuning compound spectra were generated using appropriate background correction.

Comments: None.

VOLATILE CALIBRATION OUTLIERS

3/90 SOW

Lab Name: IEPA

Case: Eagle Zinc Co.

Instrument # XL2 DATE/TIME: heated purge	Minimum RRF	Initial Cal. 10/28/93 1117			Contin. Cal. 10/29/93 933			Contin. Cal. 11/01/93 1038			Contin. Cal.			Contin. Cal.		
		RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q
Chloromethane	0.010		37.8													
Bromomethane	0.100															
Vinyl Chloride	0.100															
Chloroethane	0.010															
Methylene Chloride	0.010															
Acetone	0.010								32.9	J						
Carbon Disulfide	0.010															
1,1-Dichloroethene	0.100															
1,1-Dichloroethane	0.200															
1,2-Dichloroethene (total)	0.010															
Chloroform	0.200															
1,2-Dichloroethane	0.100															
2-Butanone	0.010					29.4	J		49.4	J						
1,1,1-Trichloroethane	0.100															
Carbon Tetrachloride	0.100															
Bromodichloromethane	0.200															
1,2-Dichloropropane	0.010															
cis-1,3-Dichloropropene	0.200															
Trichloroethene	0.300															
Dibromochloromethane	0.100															
1,1,2-Trichloroethane	0.100															
Benzene	0.500															
trans-1,3-Dichloropropene	0.100															
Bromoform	0.100															
4-Methyl-2-Pentanone	0.010								25.4	J						
2-Hexanone	0.010					25.4	J		35.0	J						
Tetrachloroethene	0.200															
1,1,2,2-Tetrachloroethane	0.500															
Toluene	0.400															
Chlorobenzene	0.500															
Ethylbenzene	0.100															
Styrene	0.300															
Xylene(total)	0.300															
Bromofluorobenzene	0.300															

AFFECTED SAMPLES:

	VBLKSL1	VBLKSL2
	X201	X203RE
	X202	X204RE
	X203	X205RE
	X204	X206RE
	X205	X207RE
	X206	X208RE
	X207	X203MS
	X208	X203MSD

Reviewer's Initials/Date: AW 12/9/93

3/92

This column of flags should be applied to the analytes on the sample data sheets.

III. Initial Calibration

GC/MS

Fraction: (VOA) SemiVOA (*circle one*)

1. ***Verify that the Correct Standard Concentrations Were Used.***

YES	NO	
[X]	[ ]	Check the Forms VI and the raw data to verify that the correct standard concentrations were used to calibrate the GC/MS insrtument(s).

2. ***Verify that the Correct Initial Calibration was Used for Water and Low Level Soils.***

YES	NO	N/A	
[X]	[ ]	[ ]	Check that initial calibrations were performed as required for water/med. level soil and low level soil.

3. ***Verify Use of Correct Standards.***

YES	NO	N/A	
[ ]	[ ]	[X]	Check that the correct standard was used for quantitation of samples, if samples were analyzed immediately subsequent to initial calibration.

4. ***Evaluate Initial Calibration RRFs and $\overline{RRF}$s.***

	YES	NO	
a.	[X]	[ ]	Check and recalculate the *RRFs* and $\overline{RRF}$*s* for several target compounds (at least one associated with each internal standard).
b.	[X]	[ ]	Check that, for all target compounds and surrogates, the $\overline{RRF}$*s* meet the applicable criteria. Note any "outliers" on the Calibration Outliers Form.

5. ***Evaluate Initial Calibration %RSDs.***

	YES	NO	
a.	[X]	[ ]	Check and recalculate the *%RSD* for several target compounds.
b.	[X]	[ ]	Check that the applicable *%RSD* criteria have been met. Note any "outliers" on the Calibration Outliers Form.

Comments: See Calibration Outliers Form.

IV. Continuing Calibration

GC/MS

Fraction: (VOA) SemiVOA (*circle one*)

1. ***Verify Continuing Calibration Frequency.***

YES	NO	
[X]	[ ]	Check the continuing calibration raw data and Forms VII to verify that continuing calibration standards were analyzed at the proper frequency and that each continuing calibration was compared to the apropriate initial calibration.

2. ***Evaluate Continuing Calibration RRFs.***

	YES	NO	
a.	[X]	[ ]	Check and recalculate the continuing calibration *RRFs* for several compounds.
b.	[X]	[ ]	Check that all target compound and surrogate *RRFs* meet the criteria.

3. ***Evaluate Continuing Calibration %Ds.***

	YES	NO	
a.	[X]	[ ]	Check and recalculate the continuing calibration *%Ds* for several compounds.
b.	[X]	[ ]	Check that all target compound and surrogate *%Ds* meet the applicable criteria.

Comments: See Calibration Outlier's Form.

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V. Blanks

Fraction: VOA SemiVOA Pest. (*circle one*)

1. ***Review Blank Results.***

YES NO
[X] [ ] Check all associated blanks for the presence of TCL compounds or TICs. Note all contaminated blanks and associated samples below.

2. ***Verify Blank Frequency.***

YES NO
[X] [ ] Check that blank analyses have been performed at the required frequency.

Blank Summary

Blank Sample No.	VBLKSL1	VBLKSL2		
Date Anal. or Extr.	10/29/93	11/01/93		
Instrument	XL2	XL2		

TCL Comp'd.	Amount	TCL Comp'd.	Amount	TCL Comp'd.	Amount	TCL Comp'd.	Amount
MeCl2	5	MeCl2	3				

TIC Comp'd.	Amount	TIC Comp'd.	Amount	TIC Comp'd.	Amount	TIC Comp'd.	Amount

Data Validation Checklist
Site Name: Eagle Zinc Co
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VI. Surrogate Spikes

GC/MS

Fraction: (VOA) SemiVOA (*circle one*)

1. Review Raw Data.

YES NO
[X] [ ] Check raw data to verify that the recoveries on the Form II are accurate and within the limits.

2. Evaluate Surrogate Recovery Calculations.

YES NO
[X] [ ] Check that the surrogate spike recoveries were calculated correctly and are free from transcription errors.

3 Evaluate Surrogate Recoveries.

YES NO
a. [X] [ ] Check that reanalyses were performed as required.

b. [X] [ ] Check that surrogate recoveries in blanks met criteria.

4. Evaluate Reanalyses.

YES NO
[X] [ ] Whenever there are two or more analyses for a particular sample, determine which are the best analyses to use. This determination must be performed in conjunction with the evaluation of the internal standard area response criteria. List below the results of the reviewers determinations.

Comments:
X205 + X207 - BFB high % R
X206 + X206RE - Toluene-d8 high % R
4. Use X203RE, X204RE, X205RE, X206RE, X207, X208RE

Data Validation Checklist
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VII. Matrix Spikes/Matrix Spike Duplicates

Fraction: (VOA) SemiVOA Pesticide (*circle one*)

1. ***Verify Frequency***

YES NO
[X] [ ] Check that MS and MSD samples were analyzed at the correct frequency.

2. ***Evaluate MS/MSD Criteria.***

YES NO
[X] [ ] Check MS/MSD results for *%R* and *RPD* are within the advisory limits.

3. ***Verify MS/MSD Calculations.***

YES NO
a. [X] [ ] Check raw data and verify that results are calculated correctly and are free from transcription errors.

b. [X] [ ] Check that *%Rs* and *RPDs* were calculated correctly.

4. ***Evaluate Sample Precision.***

YES NO
[X] [ ] Compare *%RSD* results of non-spiked compounds between the original result, MS and MSD.

X 203 Compound	Orig. Result	MS Result	MSD Result	%RSD
$MeCl_2$	9	6	6	25%
Acetone	15	10	8	33%

Comments: None

Data Validation Checklist
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SDG
No.: 344846
Laboratory: IEPA
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X. Internal Standards

GC/MS

Fraction: VOA SemiVOA (*circle one*)

1. ***Evaluate Raw Data.***

YES NO
[X] [ ] Check raw data and verify that the internal standard retention times and areas reported on the Forms VIII are correct.

2. ***Verify RT and IS Area Criteria.***

YES NO
[X] [ ] Check that retention times and internal standard area meet the appropriate criteria.

3. ***Evaluate Reanalyses.***

YES NO
[X] [ ] Whenever there are two or more analyses for a particular sample, determine which are the best analyses to use. This determination must be performed in conjunction with the evaluation of the surrogate spike recovery criteria. List the results of the reviewers determinations in Section VI., Surrogate Spikes.

Comments:
X203, X204, X204RE, X205, X205RE, X206, X206RE, ~~X207~~ X208, + X208RE – DFB + CB2 low area

X203RE, X207RE, X203MS, X203MSD – DFB low area

XI. Target Compound Identification

GC/MS

Fraction: (VOA) SemiVOA (*circle one*)

1. ***Verify Relative Retention Time (RRT) Criteria.***

YES	NO	
[X]	[ ]	Check that the RRT of reported compounds is within the criteria.

2. ***Evaluate Target Compound Spectra.***

YES	NO	
[X]	[ ]	Check the sample target compound spectra against the laboratory standard spectra; verify that the specified criteria are met.

3. ***Evaluate Possible Carryover.***

YES	NO	
[X]	[ ]	Check the raw data of the samples as related to the samples analyzed previously to verify that sample carryover has not adversely affected results.

4. ***Evaluate Chromatograms.***

YES	NO	
[X]	[ ]	Check the sample chromatograms to verify that peaks are accounted for.

Comments: None.

XII. Compound Quantitation and Reported CRQLs

Fraction: (VOA) SemiVOA Pesticide (*circle one*)

1. ***Evaluate Quantitation of Sample Results.***

YES	NO	
[X]	[ ]	Check raw data to verify calculation of sample results.

2. ***Evaluate Quantitation Parameters.***

YES	NO	N/A	
[X]	[ ]	[ ]	For GC/MS analyses, check that the correct internal standard, quantitation ion, and *RRF* were used to quantitate results. Verify that the same internal standard, quantitation ion, and *RRF* are used throughout, in both the calibration and as well as the quantitation process.

3. ***Evaluate CRQLs.***

YES	NO	
[X]	[ ]	Check that the CRQLs have been adjusted to reflect all sample dilutions, concentrations, splits, cleanup activities, and dry weight factors.

Comments: None.

XIII. Tentatively Identified Compounds

GC/MS Only

Fraction: (VOA) SemiVOA (*circle one*)

1. ***Evaluate Tentative Identifications.***

YES	NO	
[X]	[ ]	Check that all TICs reported meet the identification guidelines.

2. ***Evaluate Raw Data.***

YES	NO	
[X]	[ ]	Check raw data to verify that the laboratory has generated a library search for all required peaks in the chromatograms for samples and blanks.

3. ***Evaluate Blanks.***

YES	NO	
[X]	[ ]	Check blank sample chromatograms to verify that TIC peaks present in samples are not found in blanks.

4. ***Examine Mass Spectra.***

YES	NO	
[X]	[ ]	Check all mass spectra for every sample.

5. ***Evaluate TIC Identifications.***

YES	NO	
[X]	[ ]	Since TIC library searches often yield several candidate compounds, all reasonable choices must be considered.

6. ***Evaluate Laboratory Artifacts and Contaminants.***

YES	NO	
[X]	[ ]	Check sample results and raw data to verify that common laboratory artifacts and contaminants are not reported as sample contaminants.

XIII. TICs continued

7. ***Evaluate Possibility of False Negatives.***

	YES	NO	N/A	
a.	[X]	[ ]	[ ]	Check to determine if target compounds have been identified and quantitated as TICs.
b.	[ ]	[ ]	[X]	If target compounds have been identified and quantitated as TICs, check to determine whether the false negative is an isolated occurrence or whether additional data may be affected. Comment on all such false negatives below.

8. ***Determine That Results Are From Proper Fraction.***

YES	NO	N/A	
[X]	[ ]	[ ]	Target compounds could be identified in more than one fraction; if this occurs, check that quantitation is from the proper fraction.

9. ***Verify That Internal Standards And Surrogates Are Not Searched.***

YES	NO	
[X]	[ ]	Check that library searches were not performed on internal standards or surrogates.

10. ***Verify Estimated Quantitation of TICs.***

YES	NO	
[X]	[ ]	Check that the estimated concentration of the TICs was made using an assumed *RRF* of one.

Comments: None

XIV. GC/MS System Performance

Fraction: (VOA) SemiVOA (*circle one*)

1. ***Evaluate Overall System Performance.***

	YES	NO	
a.	[X]	[ ]	Check for high RIC background levels or shifts in absolute retention times of internal standards.
b.	[X]	[ ]	Check for excessive baseline rise at elevated temperature.
c.	[X]	[ ]	Check for extraneous peaks.
d.	[X]	[ ]	Check for loss of resolution.
e.	[X]	[ ]	Check for peak tailing or peak splitting that may result in inaccurate quantitation.

Comments: None.

II. GC/MS Instrument Performance Check

Fraction: VOA SemiVOA (*circle one*)

1. *Evaluate Forms V and Raw Data*

	YES	NO	
a.	[X]	[ ]	Check that Forms V are present and completed for each 12 hour time period.
b.	[X]	[ ]	Check for transcription errors between raw data and Forms V.
c.	[X]	[ ]	Check that the appropriate number of significant figures has been reported and that rounding errors have not occurred.
d.	[X]	[ ]	Check for calculation errors.

2. *Verify Raw Data Format*

YES	NO	
[X]	[ ]	Check mass spectral listing to determine that the mass assignment is correct and that the mass listing is normalize to the specified ion (m/z 95 for VOA, m/z 198 for semiVOA).

3. *Verify Ion Abundance Criteria*

YES	NO	
[X]	[ ]	Check that all ion abundance criteria has been met.

4. *Verify Background Correction*

YES	NO	
[X]	[ ]	Check that tuning compound spectra were generated using appropriate background correction.

Comments: None.

Data Validation Checklist
Site Name: Eagle Zinc Co.
SDG No.: 344846
Laboratory: IEPA
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III. Initial Calibration

GC/MS

Fraction: VOA SemiVOA (*circle one*)

1. ***Verify that the Correct Standard Concentrations Were Used.***

YES NO
[X] [ ] Check the Forms VI and the raw data to verify that the correct standard concentrations were used to calibrate the GC/MS instrument(s).

2. ***Verify that the Correct Initial Calibration was Used for Water and Low Level Soils.***

YES NO N/A
[ ] [ ] [X] Check that initial calibrations were performed as required for water/med. level soil and low level soil.

3. ***Verify Use of Correct Standards.***

YES NO N/A
[ ] [ ] [X] Check that the correct standard was used for quantitation of samples, if samples were analyzed immediately subsequent to initial calibration.

4. ***Evaluate Initial Calibration*** RRFs ***and*** $\overline{\text{RRF}}$s.

YES NO
a. [X] [ ] Check and recalculate the RRFs and $\overline{\text{RRF}}$s for several target compounds (at least one associated with each internal standard).

b. [X] [ ] Check that, for all target compounds and surrogates, the $\overline{\text{RRF}}$s meet the applicable criteria. Note any "outliers" on the Calibration Outliers Form.

5. ***Evaluate Initial Calibration %RSDs.***

YES NO
a. [X] [ ] Check and recalculate the *%RSD* for several target compounds.

b. [X] [ ] Check that the applicable *%RSD* criteria have been met. Note any "outliers" on the Calibration Outliers Form.

Comments: See Calibration Outliers Form.

IV. Continuing Calibration

GC/MS

Fraction: VOA (SemiVOA) *(circle one)*

1. ***Verify Continuing Calibration Frequency.***

YES	NO	
[X]	[ ]	Check the continuing calibration raw data and Forms VII to verify that continuing calibration standards were analyzed at the proper frequency and that each continuing calibration was compared to the appropriate initial calibration.

2. ***Evaluate Continuing Calibration RRFs.***

	YES	NO	
a.	[X]	[ ]	Check and recalculate the continuing calibration *RRFs* for several compounds.
b.	[X]	[ ]	Check that all target compound and surrogate *RRFs* meet the criteria.

3. ***Evaluate Continuing Calibration %Ds.***

	YES	NO	
a.	[X]	[ ]	Check and recalculate the continuing calibration *%Ds* for several compounds.
b.	[X]	[ ]	Check that all target compound and surrogate *%Ds* meet the applicable criteria.

Comments: See Calibration Outlier's Form.

SEMIVOLATILE CALIBRATION OUTLIERS

Page 1

Lab Name: IEPA

Case: Eagle Zinc Co.

Instrument # INC 500	Minimum	Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
DATE/TIME:	RRF	9/14/93 1242			11/2/93 1935			11/3/93 ~~1219~~ 1255								
		RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q
Phenol	0.800															
bis(2-Chloroethyl)ether	0.700															
2-Chlorophenol	0.800															
1,3-Dichlorobenzene	0.600															
1,4-Dichlorobenzene	0.500															
1,2-Dichlorobenzene	0.400															
2-Methylphenol	0.700															
2,2' oxybis(1-Chloropropanol)	0.010															
4-Methylphenol	0.600															
N-Nitroso-di-n-propylamine	0.500															
Hexachloroethane	0.300															
Nitrobenzene	0.200															
Isophorone	0.400															
2-Nitrophenol	0.100															
2,4-Dimethylphenol	0.200															
bis(2-Chloroethoxy)methane	0.300															
2,4-Dichlorophenol	0.200															
1,2,4-Trichlorobenzene	0.200															
Naphthalene	0.700															
4-Chloroaniline	0.010		70.1			60.2	J									
Hexachlorobutadiene	0.010															
4-Chloro-3-methylphenol	0.200															
2-Methylnaphthalene	0.400															
Hexachlorocyclopentadiene	0.010															
2,4,6-Trichlorophenol	0.200															
2,4,5-Trichlorophenol	0.200															
2-Chloronaphthalene	0.800															
2-Nitroaniline	0.010															
Dimethylphthalate	0.010															
Acenaphthylene	1.300															
2,6-Dinitrotoluene	0.200															
3-Nitroaniline	0.010		45.9			70.9	J									
Acenaphthene	0.800															
2,4-Dinitrophenol	0.010															
4-Nitrophenol	0.010															
Dibenzofuran	0.800															
2,4-Dinitrotoluene	0.200															

AFFECTED SAMPLES:

SBLKSL	X208MS	
X206	X208MSD	
X208		
X205		
X202		
X201		
X207		
X203		
X204		

Reviewer's Initials/Date: arr 12/10/93

Q - This column of flags should be applied to the analytes on the sample data sheets.

SEMIVOLATILE CALIBRATION OUTLIERS

Page 2

Name: IEPA

Case: Eagle Zinc

Instrument # INC500	Minimum	Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
DATE/TIME:	RRF	9/14/93 1242			11/2/93 1935			11/3/93 1255								
		RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q
Diethylphthalate	0.010															
4-Chlorophenyl-phenylether	0.400															
Fluorene	0.900															
4-Nitroaniline	0.010		90.6		.015	74.6	J	.026	55.9	J						
4,6-Dinitro-2-methylphenol	0.010															
N-Nitrosodiphenylamine (1)	0.010															
4-Bromophenyl-ethylether	0.100															
Hexachlorobenzene	0.100															
Pentachlorophenol	0.050															
Phenanthrene	0.700															
Anthracene	0.700															
Carbazole	0.010															
Di-n-butylphthalate	0.010															
Fluoranthene	0.600															
Pyrene	0.600															
Butylbenzylphthalate	0.010															
3,3'-Dichlorobenzidine	0.010					31.2	J									
Benzo(a)anthracene	0.800															
Chrysene	0.700															
bis(2-Ethylhexyl)phthalate	0.010															
-octylphthalate	0.010															
Benzo(b)fluoranthene	0.700															
Benzo(k)fluoranthene	0.700															
Benzo(a)pyrene	0.700															
Indeno(1,2,3-cd)pyrene	0.500															
Dibenz(a,h)anthracene	0.400															
Benzo(g,h,i)perylene	0.500															
Nitrobenzene-d5	0.200															
2-Fluorobiphenyl	0.700															
Terphenyl-d14	0.500															
Phenol-d6	0.800															
2-Fluorophenol	0.600															
2-Chlorophenol-d4	0.800															
1,2-Dichlorobenzene-d4	0.400															
4-Nitrophenol	0.010															
Dibenzofuran	0.800															
2,4-Dinitrotoluene	0.200															

3/92

Q - This column of flags should be applied to the analytes on the sample data sheets.

SEE PAGE 1 FOR AFFECTED SAMPLES

Reviewer's Initials/Date

12/10/93

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V. Blanks

Fraction: VOA (SemiVOA) Pest. *(circle one)*

1. *Review Blank Results.*

YES NO
[X] [ ] Check all associated blanks for the presence of TCL compounds or TICs. Note all contaminated blanks and associated samples below.

2. *Verify Blank Frequency.*

YES NO
[X] [ ] Check that blank analyses have been performed at the required frequency.

Blank Summary

Blank Sample No.	SBLKSL			
Date Anal. or (Extr)	10/28/93			
Instrument	INC500			

TCL Comp'd.	Amount	TCL Comp'd.	Amount	TCL Comp'd.	Amount	TCL Comp'd.	Amount
Di-n-But	780						

TIC Comp'd.	Amount	TIC Comp'd.	Amount	TIC Comp'd.	Amount	TIC Comp'd.	Amount
Unk 10.15	860						
Unk 10.88	470						
Unk Alip. Acid 33.33	230						

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VI. Surrogate Spikes

GC/MS

Fraction: VOA (SemiVOA) *(circle one)*

1. *Review Raw Data.*

YES NO
[X] [ ] Check raw data to verify that the recoveries on the Form II are accurate and within the limits.

2. *Evaluate Surrogate Recovery Calculations.*

YES NO
[X] [ ] Check that the surrogate spike recoveries were calculated correctly and are free from transcription errors.

3 *Evaluate Surrogate Recoveries.*

YES NO
a. [X] [ ] Check that reanalyses were performed as required.

b. [X] [ ] Check that surrogate recoveries in blanks met criteria.

4. *Evaluate Reanalyses.*

YES NO
[ ] [X] Whenever there are two or more analyses for a particular sample, determine which are the best analyses to use. This determination must be performed in conjunction with the evaluation of the internal standard area response criteria. List below the results of the reviewers determinations.

No reanalyses.

Comments: None.

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Laboratory: IEPA
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VII. Matrix Spikes/Matrix Spike Duplicates

Fraction: VOA (SemiVOA) Pesticide *(circle one)*

1. ***Verify Frequency***

YES	NO	
[X]	[ ]	Check that MS and MSD samples were analyzed at the correct frequency.

2. ***Evaluate MS/MSD Criteria.***

YES	NO	
[X]	[ ]	Check MS/MSD results for *%R* and *RPD* are within the advisory limits.

3. ***Verify MS/MSD Calculations.***

	YES	NO	
a.	[X]	[ ]	Check raw data and verify that results are calculated correctly and are free from transcription errors.
b.	[X]	[ ]	Check that *%Rs* and *RPDs* were calculated correctly.

4. ***Evaluate Sample Precision.***

YES	NO	
[X]	[ ]	Compare *%RSD* results of non-spiked compounds between the original result, MS and MSD.

X208 Compound	Orig. Result	MS Result	MSD Result	%RSD
Di-n-Butylphthalate	1300	1400	1500	7%

Comments:
X208 MS + X208 MSD – 4-Nitrophenol + Pentachlorophenol high %R

X. Internal Standards

GC/MS

Fraction: VOA SemiVOA (circle one)

1. ***Evaluate Raw Data.***

YES NO
[X] [ ] Check raw data and verify that the internal standard retention times and areas reported on the Forms VIII are correct.

2. ***Verify RT and IS Area Criteria.***

YES NO
[X] [ ] Check that retention times and internal standard area meet the appropriate criteria.

3. ***Evaluate Reanalyses.***

YES NO
[ ] [X] Whenever there are two or more analyses for a particular sample, determine which are the best analyses to use. This determination must be performed in conjunction with the evaluation of the surrogate spike recovery criteria. List the results of the reviewers determinations in Section VI., Surrogate Spikes.

No reanalyses.

Comments: None.

XI. Target Compound Identification

GC/MS

Fraction: VOA (SemiVOA) *(circle one)*

1. ***Verify Relative Retention Time (RRT) Criteria.***

   YES NO
   [X] [ ] Check that the RRT of reported compounds is within the criteria.

2. ***Evaluate Target Compound Spectra.***

   YES NO
   [X] [ ] Check the sample target compound spectra against the laboratory standard spectra; verify that the specified criteria are met.

3. ***Evaluate Possible Carryover.***

   YES NO
   [X] [ ] Check the raw data of the samples as related to the samples analyzed previously to verify that sample carryover has not adversely affected results.

4. ***Evaluate Chromatograms.***

   YES NO
   [X] [ ] Check the sample chromatograms to verify that peaks are accounted for.

Comments: None.

XII. Compound Quantitation and Reported CRQLs

Fraction: VOA SemiVOA Pesticide *(circle one)*

1. ***Evaluate Quantitation of Sample Results.***

YES	NO	
[X]	[ ]	Check raw data to verify calculation of sample results.

2. ***Evaluate Quantitation Parameters.***

YES	NO	N/A	
[X]	[ ]	[ ]	For GC/MS analyses, check that the correct internal standard, quantitation ion, and *RRF* were used to quantitate results. Verify that the same internal standard, quantitation ion, and *RRF* are used throughout, in both the calibration and as well as the quantitation process.

3. ***Evaluate CRQLs.***

YES	NO	
[X]	[ ]	Check that the CRQLs have been adjusted to reflect all sample dilutions, concentrations, splits, cleanup activities, and dry weight factors.

Comments: None.

XIII. Tentatively Identified Compounds

GC/MS Only

Fraction: VOA SemiVOA (*circle one*)

1. ***Evaluate Tentative Identifications.***

   YES NO
   [X] [ ] Check that all TICs reported meet the identification guidelines.

2. ***Evaluate Raw Data.***

   YES NO
   [X] [ ] Check raw data to verify that the laboratory has generated a library search for all required peaks in the chromatograms for samples and blanks.

3. ***Evaluate Blanks.***

   YES NO
   [X] [ ] Check blank sample chromatograms to verify that TIC peaks present in samples are not found in blanks.

4. ***Examine Mass Spectra.***

   YES NO
   [X] [ ] Check all mass spectra for every sample.

5. ***Evaluate TIC Identifications.***

   YES NO
   [X] [ ] Since TIC library searches often yield several candidate compounds, all reasonable choices must be considered.

6. ***Evaluate Laboratory Artifacts and Contaminants.***

   YES NO
   [X] [ ] Check sample results and raw data to verify that common laboratory artifacts and contaminants are not reported as sample contaminants.

XIII. TICs continued

7. *Evaluate Possibility of False Negatives.*

	YES	NO	N/A	
a.	[X]	[ ]	[ ]	Check to determine if target compounds have been identified and quantitated as TICs.
b.	[ ]	[ ]	[X]	If target compounds have been identified and quantitated as TICs, check to determine whether the false negative is an isolated occurrence or whether additional data may be affected. Comment on all such false negatives below.

8. *Determine That Results Are From Proper Fraction.*

YES	NO	N/A	
[X]	[ ]	[ ]	Target compounds could be identified in more than one fraction; if this occurs, check that quantitation is from the proper fraction.

9. *Verify That Internal Standards And Surrogates Are Not Searched.*

YES	NO	
[X]	[ ]	Check that library searches were not performed on internal standards or surrogates.

10. *Verify Estimated Quantitation of TICs.*

YES	NO	
[X]	[ ]	Check that the estimated concentration of the TICs was made using an assumed *RRF* of one.

Comments: None.

XIV. GC/MS System Performance

Fraction: VOA SemiVOA (*circle one*)

1. ***Evaluate Overall System Performance.***

	YES	NO	
a.	[X]	[ ]	Check for high RIC background levels or shifts in absolute retention times of internal standards.
b.	[X]	[ ]	Check for excessive baseline rise at elevated temperature.
c.	[X]	[ ]	Check for extraneous peaks.
d.	[X]	[ ]	Check for loss of resolution.
e.	[X]	[ ]	Check for peak tailing or peak splitting that may result in inaccurate quantitation.

Comments: None.

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II. Pesticide Instrument Performance Check

1. ***Resolution Check Mixture***

	YES	NO	
a.	[X]	[ ]	Check the Form VIII PEST. to determine that the resolution check mixture(s) was analyzed in the proper sequence.
b.	[X]	[ ]	Check the resolution check mixture data and the Form VI PEST.-4 to verify that the resolution criterion was met.

2. ***Performance Evaluation Mixture***

	YES	NO	
a.	[X]	[ ]	Check the Form VII PEST. to determine that the PEM(s) was analyzed at the proper frequency and position in the initial calibration sequence.
b.	[X]	[ ]	Check the PEM data from the initial and continuing calibrations to verify that the resolution criterion was met.
c.	[X]	[ ]	Check the PEM data from the initial and continuing calibrations and Form VII PEST.-1 to verify that the retention times are within the retention time windows.
d.	[X]	[ ]	Check that the *RPDs* meet the criterion.
e.	[X]	[ ]	Check that the breakdowns for 4,4'-DDT and Endrin meet the criteria.

Comments: None.

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III. Initial Calibration

PESTICIDES

1. Individual Standard Mixtures.

	YES	NO	
a.	[X]	[ ]	Check the Form VIII PEST to verify that the Individual Standard Mixtures were analyzed at the proper frequency for each GC column and instrument. Check that the proper concentrations were used.
b.	[X]	[ ]	Check the raw data to determine that the midpoint standard is at the proper concentration and verify that the resolution criterion has been met for each midpoint concentration standard.
c.	[X]	[ ]	Check the Individual Standard Mixture data and Form VI PEST.-1 and review the calculated retention time windows for calculation and transcription errors.
d.	[X]	[ ]	Check the Individual Standard Mixture data and Form VI PEST.-2 to verify that the *%RSDs* for the calibration factors meet the criterion. Check and recalculate several *%RSDs* for errors.

2. Multi Component Compounds.

a.	[X]	[ ]	Check the raw data and the Form VIII PEST. to verify that the Multi-component Standards were analyzed at the proper concentration and frequency for each GC column and instrument.
b.	[X]	[ ]	Check the raw data and Form VI PEST.-3 to verify that at least three peaks were used for calibration and that retention time and calibration factor data are available for each peak.

Comments: None.

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IV. Continuing Calibration

PESTICIDES

1. ***Evaluate Continuing Calibration Standards.***

YES NO
[X] [ ] Check the Form VIII PEST to verify that the Instrument Blanks, PEMs, and Individual Standard Mixtures were analyzed at the proper frequency and that no more than 12:00 hours elapsed between calibration brackets in an ongoing analytical sequence.

2. ***Individual Standard Mixtures Resolution.***

YES NO
[X] [ ] Check the data for the midpoint concentration of the Individual Standard Mixtures to verify that the resolution criteria was met.

3. ***Individual Standard Mixtures Retention Times***

YES NO
[X] [ ] Check the data for each of the single component pesticides and surrogates in the midpoint concentration of the Individual Standard Mixtures to verify that the retention times are within the appropriate windows.

4. ***Evaluate Continuing Calibration RPDs.***

YES NO
[X] [ ] Check the data for the midpoint concentration of the Individual Standard Mixtures and Form VII PEST.-2 to verify that the *RPDs* between the calculated amount and the true amount for each of the pesticides and surrogates meet the criterion.

Comments:
4. IndAM03 (col DB-1701) 10/29/93 1648
Methoxychlor 26.5% RPD - high * No samples affected

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V. Blanks

Fraction: VOA SemiVOA (Pest.) *(circle one)*

1. ***Review Blank Results.***

YES NO
[X] [ ] Check all associated blanks for the presence of TCL compounds or TICs. Note all contaminated blanks and associated samples below.

2. ***Verify Blank Frequency.***

YES NO
[X] [ ] Check that blank analyses have been performed at the required frequency.

Blank Summary

Blank Sample No.	PBLKS1		PIBLK12				
Date Anal. or Extr.	10/28/93 Ext.		11/5/93 Analyzed				
Instrument	HP 1+2		HP 1+2				
TCL Comp'd.	Amount	TCL Comp'd.	Amount	TCL Comp'd.	Amount	TCL Comp'd.	Amount
Aldrin	0.37	DDT	0.0052				
		Toxaphene	0.12				

TIC Comp'd.	Amount	TIC Comp'd.	Amount	TIC Comp'd.	Amount	TIC Comp'd.	Amount
NA		NA					

Comments: All other instrument blanks and GPC blank are O.K.

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VI. Surrogate Spikes

Pesticides

1. ***Review Raw Data.***

YES	NO	
[X]	[ ]	Check raw data to verify that the recoveries on the Form II are accurate and within the limits.

2. ***Evaluate Surrogate Recovery Calculations.***

YES	NO	
[X]	[ ]	Check that the surrogate spike recoveries were calculated correctly and are free from transcription errors.

3 ***Evaluate Possible Interferences.***

YES	NO	N/A	
[ ]	[ ]	[X]	If surrogate spike recoveries are not acceptable, check the raw data for possible interferences which may have effected surrogate recoveries.

4. ***Evaluate Retention Times.***

YES	NO	N/A	
[ ]	[ ]	[X]	If retention time limits are not met, check the raw data for possible misidentification of GC peaks.

5. ***Evaluate Any Low Recoveries.***

YES	NO	N/A	
[ ]	[ ]	[X]	If low surrogate recoveries are observed, check whether low recoveries are due to sample dilution.

6. ***Evaluate Surrogate Analyses in Blanks.***

YES	NO	
[X]	[ ]	Check that all surrogate analysis criteria (retention time and advisory recovery criteria) were met in all blank samples.

Comments: None.

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VII. Matrix Spikes/Matrix Spike Duplicates

Fraction: VOA SemiVOA (Pesticide) *(circle one)*

1. Verify Frequency

YES NO
[X] [ ] Check that MS and MSD samples were analyzed at the correct frequency.

2. Evaluate MS/MSD Criteria.

YES NO
[X] [ ] Check MS/MSD results for *%R* and *RPD* are within the advisory limits.

3. Verify MS/MSD Calculations.

YES NO
a. [X] [ ] Check raw data and verify that results are calculated correctly and are free from transcription errors.

b. [X] [ ] Check that *%Rs* and *RPDs* were calculated correctly.

4. Evaluate Sample Precision.

YES NO
[X] [ ] Compare *%RSD* results of non-spiked compounds between the original result, MS and MSD.

X205 Compound	Orig. Result	MS Result	MSD Result	%RSD
Endrin ketone	1.6	3.2	2.5	33%

Comments: None

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X. Pesticide Cleanup Checks

1. ***Florisil Cartridge Check.***

	YES	NO	
a.	[X]	[ ]	Check the data from the Florisil cartridge solution analyses and the Form IX PEST.-1 and check some of the *%R* calculations; verify that there are no calculation or transcription errors.
b.	[X]	[ ]	Check all criteria have been met.

2. ***Gel Permeation Chromatography.***

	YES	NO	
a.	[X]	[ ]	Check the data from the GPC calibration check analyses and the Form IX PEST.-2 and recalculate some of the *%R* results; verify that there are no calculation or transcription errors.
b.	[X]	[ ]	Check all criteria have been met and that Arochlor patterns are similar to those of previous standards.

Comments: None.

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XI. Target Compound Identification

Pesticides

1. Evaluate Reported Results.

	YES	NO	
a.	[X]	[ ]	Check the Form I PEST., the associated raw data, and Form X PEST.-1 and Form X PEST.-2 to confirm reported detected analytes.
b.	[X]	[ ]	Check the Form I PEST., the associated raw data, and Form X PEST.-1 and Form X PEST.-2 to confirm reported non-detects.
c.	[X]	[ ]	Check the associated blank data for potential interferences to evaluate sample data for false positives.
d.	[X]	[ ]	Check the calibration data for adequate retention time windows to evaluate the sample data for false positives and false negatives.

2. Evaluate Multi-Component Analyte Results.

YES	NO	
[X]	[ ]	Compare the retention times and relative peak height ratios of major multi-component analyte peaks against appropriate standard chromatograms.

3. Verify GC/MS Confirmations if Applicable.

YES	NO	N/A	
[ ]	[ ]	[X]	Check that GC/MS confirmation was performed for pesticide concentrations in the final sample extract which exceeded 10 ng/ul.

Comments: None.

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XII. Compound Quantitation and Reported CRQLs

Fraction: VOA SemiVOA (Pesticide) (*circle one*)

1. ***Evaluate Quantitation of Sample Results.***

YES	NO	
[X]	[ ]	Check raw data to verify calculation of sample results.

2. ***Evaluate Quantitation Parameters.***

YES	NO	N/A	
[ ]	[ ]	[X]	For GC/MS analyses, check that the correct internal standard, quantitation ion, and *RRF* were used to quantitate results. Verify that the same internal standard, quantitation ion, and *RRF* are used throughout, in both the calibration and as well as the quantitation process.

3. ***Evaluate CRQLs.***

YES	NO	
[X]	[ ]	Check that the CRQLs have been adjusted to reflect all sample dilutions, concentrations, splits, cleanup activities, and dry weight factors.

Comments: None.

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XV. Overall Assessment of Data

Evaluate the Overall Quality of the Data.

YES	NO	
[X]	[ ]	Evaluate any technical problems which have not been previously addressed.
[X]	[ ]	Review all available materials to assess the overall quality of the dada, keeping in mind the additive nature of analytical problems.
[X]	[ ]	If appropriate information is available, assess the usability of the data to assist the data user in avoiding inappropriate use of the data. Review all available information, including the QAPjP, SAP, and communications with the data user that concerns the intended use of the data.

Provide a brief narrative to give the data user an indication of the analytical limitations of the data. Include any details from the above checks. Any inconsistency of the data with the Case Narrative should be noted. If sufficient information is available, the reviewer should give an assessment of the usability of the data within the given context.

Data are useable as qualified on Forms 1.

Alicia Rudd