EPA Region 5 Records Ctr.
135944

ENVIRONMENTAL QUALITY MANAGEMENT, INC.
1310 Kemper Meadow Drive • Suite 100
Cincinnati, Ohio 45240
(513) 825-7500
FAX (513) 825-7495

January 15, 1999

Mr. Walter Nied
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, IL. 60604
Mail Code SE-5J

Re: EPA Contract No. 68-S5-9801
Delivery Order No. 9801-05-022

COC # A-3839

Dear Mr. Nied:

Enclosed please find the final data package for the one (1) solid sample taken at the above referenced site. The sample "Latex Solid" was received at Specialized Assays in Nashville, Tennessee on November 25, 1998 and analyzed for TCLP Volatiles by Methods 1311/8260, TCLP Semivolatiles by Methods 1311/8270, TCLP Metals (RCRA) by Methods 1311/6010 and 7470, Flashpoint by Method 1010, BTUs by Method ASTM D3286, Polychlorinated Bi-phenyls by Method 8082, Reactive Cyanide by Method 9012, and Reactive Sulfide by Method 9030. The final data package was sent to Environmental Quality Management, Inc., (EQ) upon completion of the analyses. It appears that all information in the data package has been provided and no quality control exceptions were noted.

The enclosed data has been reviewed based upon method requirements and the OSWER Directive. If you have any questions regarding this report, please feel free to contact me at 800-500-0575.

Sincerely,

ENVIRONMENTAL QUALITY MANAGEMENT, INC.

Sharon Laycock

Sharon Laycock
QA/QC Chemist

EQ Environmental Quality Management, Inc.

ANALYSIS REQUEST AN[illegible]
CHAIN OF CUSTODY RECORD

Reference Document No. A- 3839
Page 1 of 1

6738 125914

Project Name: Maple Lake Drum Dump
Project Number: 3141-22
Project Manager: Mark Douglas
Sample Team Leader: Mark Douglas

Lab Destination: Specialized Assays
Lab Contact/Phone: Mark Hollingsworth
Lab Purchase Order No.: 7079
Carrier/Waybill No.:

Quote# 122998MH299

Report to: Sharon Laycock 513-825-9728

Bill to: EQM
1310 Kemper Meadow
Cincinnati OH 45240

ONE CONTAINER PER LINE

	Sample Number	Sample Description/Type	Date/Time Collected	Container Type	Sample Volume	Pre-servative	Requested Analytical Method/(Parameters)	Condition on Receipt (Lab)
	S1	Solid Solid					See comments #1	165564
	S2	Gooey Solid					See comments #1	165565
*	L1-top	Liquid. (TOP)					See comments #2	165566
*	L1-bottom	(BOTTOM)					See comments #2	

Special Instructions: Sample L1 has 2 phases. Separate + analyze separately.

Possible Hazard Identification:
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Other _____

Sample Disposal:
Return to Client ☐ Disposal by Lab ☒ Archive _____ (mos.)

Turnaround Time Required:
Normal ☐ Rush ☒ Results Required by 1-5-99

QA Requirements:
EQ level I

1. Relinquished by (Signature/Affiliation): [signature] Date: 12-29-98 Time: 5:00 PM
1. Received by (Signature/Affiliation): Fed Ex Date: 12-29-98 Time:

2. Relinquished by (Signature/Affiliation): Date: Time:
2. Received by (Signature/Affiliation): [signature] Date: 12/30/98 Time: 900

Comments:
#1) TCLP VOA, TCLP SVOA, TCLP RCRA metal + Cu Zn, React. CN + S, Flash, pH / #2) VOAs, SVOAs, Flash, BTU, PCBs

EQ Environmental Quality Management, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No. A- 3839
Page 1 of 1

673 8

Project Name: Maple Lake Drum Dump
Project Number: 3141-22
Project Manager: Mark Douglas
Sample Team Leader: Mark Douglas

Lab Destination: Specialized Assays
Lab Contact/Phone: Mark Hollingsworth
Lab Purchase Order No.: 7079
Carrier/Waybill No.:

Quote# 122998MH299

Report to: Sharon Laycock 513-825-9728

Bill to: EQM
1310 Kemper Meadow
Cincinnati OH 45240

ONE CONTAINER PER LINE

Sample Number	Sample Description/Type	Date/Time Collected	Container Type	Sample Volume	Pre-servative	Requested Analytical Method/(Parameters)	Condition on Receipt (Lab)
S1	Solid Solid					See comments #1	
S2	Gooey Solid					See comments #1	
* L1-top	Liquid (TOP)					See comments #2	
* L1-bottom	(water) (BOTTOM)					see comments #2	

Rec'd ≈ 100 ml of water QNS for requested tests

Special Instructions: Sample L1 has 2 phases. Separate + analyze separately. Disregard Bottom for now

Possible Hazard Identification: Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Other Tackle Box @ 1430

Sample Disposal: Return to Client ☐ Disposal by Lab ☒ Archive _____ (mos.)

Turnaround Time Required: Normal ☐ Rush ☒ Results Required by 1-5-99

QA Requirements: EQ level I

1. Relinquished by (Signature/Affiliation) Mark E D	Date: 12-29-98 Time: 5:00 PM	1. Received by (Signature/Affiliation) Fed Ex	Date: 12-29-98 Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:

Comments:
#1) TCLP VOA, TCLP SVOA, TCLP RCRA metal + Cu Zn, React. CN + S, Flash, pH
#2) VOAs, SVOAs, Flash, BTU, PCBs

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ENVIRONMENTAL QUALITY MGMT. 6738
JACKIE DOAN
1310 KEMPER MEADOW DRIVE
CINCINNATI, OH 45240

Lab Number: 98-A165564
Sample ID: S1 SOLID SOLID
Sample Type: Solid waste
Site ID:

Date Collected:
Time Collected:
Date Received: 12/30/98
Time Received: 9:00

Project: 3141-22
Project Name: MAPLE LAKE DRUM DUMP
Sampler: MARK DOUGLAS

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS										
Reactive Cyanide	ND	mg/kg	2.0	2.0	1	1/ 5/99	10:20	J.Temple	SW-846	5080
Reactive Sulfide	ND	mg/kg	20.0	20.0	1	1/ 5/99	10:20	J.Temple	SW-846	5080
pH	7.60	units			1	12/30/98	15:00	E. Mabry	9045	3620
Flash Point, Closed Cup	NO FLASH UP TO 200F					12/31/98	11:00	D. Hoover	1010	4209

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Time	Analyst	Method
Arsenic	< 0.10	mg/l	5.0	105	1/ 4/99	10:05	R. Kelley	60100
Barium	< 1.00	mg/l	100	96	1/ 4/99	10:05	R. Kelley	60100
Cadmium	< 0.100	mg/l	1.0	95	1/ 4/99	10:05	R. Kelley	60100
Chromium	< 0.50	mg/l	5.0	95	1/ 4/99	10:05	R. Kelley	60100
Copper	< 0.50	mg/l	N/A	101	1/ 4/99	10:05	R. Kelley	60100
Lead	< 0.50	mg/l	5.0	97	1/ 4/99	10:05	R. Kelley	60100
Mercury	< 0.010	mg/l	0.20	93	1/ 4/99	10:01	R. Kelley	7470A
Selenium	< 0.100	mg/l	1.0	105	1/ 4/99	10:05	R. Kelley	60100
Silver	< 0.10	mg/l	5.0	103	1/ 4/99	10:05	R. Kelley	60100
Zinc	< 0.50	mg/l	N/A	97	1/ 4/99	10:05	R. Kelley	60100
Benzene	< 0.10	mg/l	0.5	116	12/31/98	14:30	M. Hurt	8260
Carbon tetrachloride	< 0.1	mg/l	0.5	86	12/31/98	14:30	M. Hurt	8260
Chlorobenzene	< 0.10	mg/l	100	96	12/31/98	14:30	M. Hurt	8260
Chloroform	< 0.100	mg/l	6.0	102	12/31/98	14:30	M. Hurt	8260
1,2-Dichloroethane	< 0.10	mg/l	0.5	110	12/31/98	14:30	M. Hurt	8260
1,1-Dichloroethene	< 0.10	mg/l	0.7	92	12/31/98	14:30	M. Hurt	8260
Methylethylketone	< 1.0	mg/l	200	86	12/31/98	14:30	M. Hurt	8260
Tetrachloroethene	< 0.1	mg/l	0.7	96	12/31/98	14:30	M. Hurt	8260
Trichloroethene	< 0.10	mg/l	0.5	96	12/31/98	14:30	M. Hurt	8260
Vinyl Chloride	< 0.1	mg/l	0.2	114	12/31/98	14:30	M. Hurt	8260
Cresols	< 0.10	mg/l	200	60	1/ 6/99	10:03	Carmichael	8270
1,4-Dichlorobenzene	< 0.1	mg/l	7.5	68	1/ 6/99	10:03	Carmichael	8270
2,4-Dinitrotoluene	< 0.10	mg/l	0.13	78	1/ 6/99	10:03	Carmichael	8270
Hexachlorobenzene	< 0.10	mg/l	0.13	24	1/ 6/99	10:03	Carmichael	8270
Hexachlor-1,3-butadien	< 0.1	mg/l	0.5	64	1/ 6/99	10:03	Carmichael	8270

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A165564
Sample ID: S1 SOLID SOLID

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Time	Analyst	Method
Hexachloroethane	< 0.1	mg/l	3.0	50	1/ 6/99	10:03	Carmichael	8270
Nitrobenzene	< 0.1	mg/l	2.0	62	1/ 6/99	10:03	Carmichael	8270
Pentachlorophenol	< 0.1	mg/l	100	38	1/ 6/99	10:03	Carmichael	8270
Pyridine	< 0.1	mg/l	5.0	44	1/ 6/99	10:03	Carmichael	8270
2,4,5-Trichlorophenol	< 0.10	mg/l	400	73	1/ 6/99	10:03	Carmichael	8270
4,6-Trichlorophenol	< 0.1	mg/l	2.0	72	1/ 6/99	10:03	Carmichael	8270
TCLP Extraction	Completed				12/30/98	16:00	E. Mabry	1311
Zero Headspace Extraction	Completed				12/30/98	16:00	E. Mabry	1311

ND = Not detected at the report limit.

TCLP preparation follows method 1311, SW-846 Revision 3.

Flash point/ignitability reported to the nearest 10 deg F.

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	115.	60. - 138.
VOA Surrogate, Toluene d8	103.	80. - 123.
VOA Surrogate, 4-Bromofluorobenzene	109.	73. - 122.
surr-Nitrobenzene-d5	58.	15. - 105.
surr-2-Fluorobiphenyl	60.	17. - 110.
surr-Terphenyl d14	66.	10. - 116.
surr-Phenol d5	22.	10. - 100.
surr-2-Fluorophenol	36.	9. - 100.
surr-2,4,6-Tribromophenol	72.	15. - 134.

Report Approved By: JJMitchell Report Date: 1/ 6/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ENVIRONMENTAL QUALITY MGMT. 6738
JACKIE DOAN
1310 KEMPER MEADOW DRIVE
CINCINNATI, OH 45240

Lab Number: 98-A165565
Sample ID: S2 GOOEY SOLID
Sample Type: Solid waste
Site ID:

Date Collected:
Time Collected:
Date Received: 12/30/98
Time Received: 9:00

Project: 3141-22
Project Name: MAPLE LAKE DRUM DUMP
Sampler: MARK DOUGLAS

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS										
Reactive Cyanide	ND	mg/kg	2.0	2.0	1	1/ 5/99	10:20	J.Temple	SW-846	5080
Reactive Sulfide	ND	mg/kg	20.0	20.0	1	1/ 5/99	10:20	J.Temple	SW-846	5080
pH	6.80	units			1	12/30/98	15:00	E. Mabry	9045	3620
Flash Point, Closed Cup	FLASHED AT DR KELLN 80F					12/31/98	11:00	D. Hoover	1010	4209

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Time	Analyst	Method
Arsenic	< 0.10	mg/l	5.0	105	1/ 4/99	10:05	R. Kelley	60100
Barium	< 1.00	mg/l	100	96	1/ 4/99	10:05	R. Kelley	60100
Cadmium	< 0.100	mg/l	1.0	95	1/ 4/99	10:05	R. Kelley	60100
Chromium	< 0.50	mg/l	5.0	95	1/ 4/99	10:05	R. Kelley	60100
Copper	< 0.50	mg/l	N/A	101	1/ 4/99	10:05	R. Kelley	60100
Lead	2.20	mg/l	5.0	97	1/ 4/99	10:05	R. Kelley	60100
Mercury	< 0.010	mg/l	0.20	93	1/ 4/99	10:01	R. Kelley	74700
Selenium	< 0.100	mg/l	1.0	105	1/ 4/99	10:05	R. Kelley	60100
Silver	< 0.10	mg/l	5.0	103	1/ 4/99	10:05	R. Kelley	60100
Zinc	20.9	mg/l	N/A	97	1/ 4/99	10:05	R. Kelley	60100
Benzene	< 0.10	mg/l	0.5	112	12/31/98	14:30	K. Hurt	8260
Carbon tetrachloride	3.6	mg/l	0.5	86	12/31/98	14:30	K. Hurt	8260
Chlorobenzene	< 0.10	mg/l	100	92	12/31/98	14:30	K. Hurt	8260
Chloroform	< 0.100	mg/l	6.0	108	12/31/98	14:30	K. Hurt	8260
1,2-Dichloroethane	< 0.10	mg/l	0.5	108	12/31/98	14:30	K. Hurt	8260
1,1-Dichloroethene	< 0.10	mg/l	0.7	92	12/31/98	14:30	K. Hurt	8260
Methylethylketone	152.	mg/l	200	86	12/31/98	14:30	K. Hurt	8260
Tetrachloroethene	< 0.1	mg/l	0.7	86	12/31/98	14:30	K. Hurt	8260
Trichloroethene	< 0.10	mg/l	0.5	92	12/31/98	14:30	K. Hurt	8260
Vinyl Chloride	< 0.1	mg/l	0.2	116	12/31/98	14:30	K. Hurt	8260
Cresols	< 0.10	mg/l	200	66	1/ 6/99	10:03	Carmichael	8270
1,4-Dichlorobenzene	< 0.1	mg/l	7.5	74	1/ 6/99	10:03	Carmichael	8270
2,4-Dinitrotoluene	< 0.10	mg/l	0.13	80	1/ 6/99	10:03	Carmichael	8270
Hexachlorobenzene	< 0.10	mg/l	0.13	24	1/ 6/99	10:03	Carmichael	8270
Hexchlor-1,3-butadien	< 0.1	mg/l	0.5	72	1/ 6/99	10:03	Carmichael	8270

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A165565
Sample ID: S2 GOOEY SOLID

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Time	Analyst	Method
Hexachloroethane	< 0.1	mg/l	3.0	58	1/ 6/99	10:03	Carmichael	8270
Nitrobenzene	< 0.1	mg/l	2.0	66	1/ 6/99	10:03	Carmichael	8270
Pentachlorophenol	< 0.1	mg/l	100	52	1/ 6/99	10:03	Carmichael	8270
Pyridine	< 0.1	mg/l	5.0	44	1/ 6/99	10:03	Carmichael	8270
2,4,5-Trichlorophenol	< 0.10	mg/l	400	74	1/ 6/99	10:03	Carmichael	8270
,6-Trichlorophenol	< 0.1	mg/l	2.0	82	1/ 6/99	10:03	Carmichael	8270
TCLP Extraction	Completed				12/30/98	16:00	E. Mabry	1311
Zero Headspace Extraction	Completed				12/30/98	16:00	E. Mabry	1311

ND = Not detected at the report limit.

TCLP prepartion follows method 1311, SW-846 Revision 3.

Flash point/ignitability reported to the nearest 10 deg F.

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	115.	68. - 138.
VOA Surrogate, Toluene d8	87.	80. - 123.
[illegible] Surrogate, 4-BromoFluorobenzene	103.	73. - 122.
,r-Nitrobenzene-d5	72.	15. - 105.
surr-2-Fluorobiphenyl	72.	17. - 110.
surr-Terphenyl d14	65.	10. - 116.
surr-Phenol d5	30.	10. - 100.
surr-2-Fluorophenol	46.	9. - 100.
surr-2,4,6-Tribromophenol	94.	15. - 134.

Report Approved By: JAMitchell Report Date: 1/ 6/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ENVIRONMENTAL QUALITY MGMT. 6738
JACKIE DOAN
1310 KEMPER MEADOW DRIVE
CINCINNATI, OH 45240

Lab Number: 98-A165566
Sample ID: L1-TOP
Sample Type: Solid waste
Site ID:

Date Collected:
Time Collected:
Date Received: 12/30/98
Time Received: 9:00

Project: 3141-22
Project Name: MAPLE LAKE DRUM DUMP
Sampler: MARK DOUGLAS

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Acenaphthylene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Anthracene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Benzo(a)anthracene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Benzo(a)pyrene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Benzo(b)Fluoranthene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Benzo(g,h,i)perylene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Benzo(k)Fluoranthene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
4-Bromophenylphenylether	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Butylbenzylphthalate	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Carbazole	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
4-Chloro-3-methylphenol	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
4-Chloroaniline	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
bis(2-Chloroethoxy)methane	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
bis(2-Chloroethyl)ether	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
bis(2-Chloroisopropyl)ether	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2-Chloronaphthalene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2-Chlorophenol	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
4-Chlorophenylphenylether	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Chrysene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Dibenzofuran	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Dibenz(a,h)anthracene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
1,2-Dichlorobenzene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
1,3-Dichlorobenzene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
1,4-Dichlorobenzene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
3,3'-Dichlorobenzidine	ND	ug/kg	2000	0.666	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2,4-Dichlorophenol	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Diethylphthalate	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2,4-Dimethylphenol	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Dimethylphthalate	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Di-n-butylphthalate	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
4,6-Dinitro-2-methylphenol	ND	ug/kg	2500	0.830	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2,4-Dinitrophenol	ND	ug/kg	2500	0.830	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2,4-dinitrotoluene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2,6-Dinitrotoluene	ND	ug/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A165566
Sample ID: L1-TOP

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Di-n-octylphthalate	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Fluoranthene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Fluorene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Hexachlorobenzene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Hexachlorobutadiene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Hexachlorocyclopentadiene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Hexachloroethane	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Indeno(1,2,3-cd)pyrene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Isophorone	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2-Methylnaphthalene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2-Methylphenol	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
m,p-Methylphenol	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Naphthalene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2-Nitroaniline	ND	ng/kg	2500	0.830	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
3-Nitroaniline	ND	ng/kg	2500	0.830	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
4-Nitroaniline	ND	ng/kg	2500	0.830	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Nitrobenzene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2-Nitrophenol	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
4-Nitrophenol	ND	ng/kg	2500	0.830	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
N-nitrosodi-n-propylamine	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
N-nitrosodiphenylamine	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Pentachlorophenol	ND	ng/kg	2500	0.830	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Phenanthrene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Phenol	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Pyrene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
Bis(2-ethylhexyl)phthalate	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
1,2,4-Trichlorobenzene	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2,4,5-Trichlorophenol	ND	ng/kg	2500	0.830	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
2,4,6-Trichlorophenol	ND	ng/kg	1000	0.333	100	1/ 5/99	16:10	M.Goodrich	8270C	5500
VOLATILE ORGANICS										
Acetone	ND	ng/kg	100.0	0.0100	10000	12/31/98	22:01	M. Hurt	8260B	5115
Benzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	M. Hurt	8260B	5115
Bromobenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	M. Hurt	8260B	5115
Bromochloromethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	M. Hurt	8260B	5115
Bromoform	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	M. Hurt	8260B	5115
Bromomethane	ND	ng/kg	100.0	0.0100	10000	12/31/98	22:01	M. Hurt	8260B	5115
2-Butanone	ND	ng/kg	100.0	0.0100	10000	12/31/98	22:01	M. Hurt	8260B	5115
n-Butylbenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	M. Hurt	8260B	5115
sec-Butylbenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	M. Hurt	8260B	5115
t-Butylbenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	M. Hurt	8260B	5115
Carbon disulfide	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	M. Hurt	8260B	5115
Carbon tetrachloride	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	M. Hurt	8260B	5115
Chlorobenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	M. Hurt	8260B	5115

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A165566
Sample ID: L1-TOP

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Chloroethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
2-Chloroethylvinylether	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
Chloroform	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
Chloromethane	ND	ng/kg	100.0	0.0100	10000	12/31/98	22:01	K. Hurt	8260B	5115
2-Chlorotoluene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
4-Chlorotoluene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,2-Dibromo-3-chloropropane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
Dibromochloromethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,2-Dibromoethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
Dibromomethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,2-Dichlorobenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,3-Dichlorobenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,4-Dichlorobenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
Dichlorodifluoromethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,1-Dichloroethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,2-Dichloroethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,1-Dichloroethene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
cis-1,2-Dichloroethene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
trans-1,2-Dichloroethene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,2-Dichloropropane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,3-Dichloropropane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
2,2-Dichloropropane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,1-Dichloropropene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
cis-1,3-Dichloropropene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
trans-1,3-Dichloropropene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
Ethylbenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
Hexachlorobutadiene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
2-Hexanone	ND	ng/kg	100.0	0.0100	10000	12/31/98	22:01	K. Hurt	8260B	5115
Isopropylbenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
4-Isopropyltoluene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
4-Methyl-2-pentanone	ND	ng/kg	100.0	0.0100	10000	12/31/98	22:01	K. Hurt	8260B	5115
Methylene chloride	ND	ng/kg	100.0	0.0100	10000	12/31/98	22:01	K. Hurt	8260B	5115
Naphthalene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
n-Propylbenzene	60.00	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
Styrene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,1,1,2-Tetrachloroethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,1,2,2-Tetrachloroethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
Tetrachloroethene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
Toluene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,2,3-Trichlorobenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,2,4-Trichlorobenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,1,1-Trichloroethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
1,1,2-Trichloroethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115
Trichloroethene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	K. Hurt	8260B	5115

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A165566
Sample ID: L1-TOP

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,2,3-Trichloropropane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	N. Hurt	8260B	5115
1,2,4-Trimethylbenzene	380.0	ng/kg	20.00	0.0020	10000	12/31/98	22:01	N. Hurt	8260B	5115
1,3,5-Trimethylbenzene	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	N. Hurt	8260B	5115
Vinyl chloride	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	N. Hurt	8260B	5115
Xylenes	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	N. Hurt	8260B	5115
sodichloromethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	N. Hurt	8260B	5115
Trichlorofluoromethane	ND	ng/kg	20.00	0.0020	10000	12/31/98	22:01	N. Hurt	8260B	5115
PESTICIDE/PCB's/HERBICIDES										
Aroclor 1016	ND	ng/kg	1.000	0.0333	1	1/ 5/99	15:28	W. Klepper	8082	5001
Aroclor 1221	ND	ng/kg	1.000	0.0667	1	1/ 5/99	15:28	W. Klepper	8082	5001
Aroclor 1232	ND	ng/kg	1.000	0.0333	1	1/ 5/99	15:28	W. Klepper	8082	5001
Aroclor 1242	ND	ng/kg	1.000	0.0333	1	1/ 5/99	15:28	W. Klepper	8082	5001
Aroclor 1248	ND	ng/kg	1.000	0.0333	1	1/ 5/99	15:28	W. Klepper	8082	5001
Aroclor 1254	ND	ng/kg	1.000	0.0333	1	1/ 5/99	15:28	W. Klepper	8082	5001
Aroclor 1260	ND	ng/kg	1.000	0.0333	1	1/ 5/99	15:28	W. Klepper	8082	5001
GENERAL CHEMISTRY PARAMETERS										
Flash Point, Closed Cup	ND FLASH UP TO 200F					12/31/98	11:00	D. Hoover	1010	4209
BTU	12700	BTU/lb			1	1/ 4/99	16:45	D. Hoover	D3286	4895

"" = Not detected at the report limit.

Flash point/ignitability reported to the nearest 10 deg F.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
BNA's	1.00 gm	1.0 ml	1/ 5/99	J. Jacobs	3550

Surrogate	% Recovery	Target Range
surr-1,2-Dichloroethane, d4	93.	48. - 160.
surr-Toluene d8	96.	79. - 119.
surr-4-Bromofluorobenzene	102.	69. - 122.
surr-TCMX	117.	20. - 122.

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A165566
Sample ID: L1-TOP

Report Approved By: _____ Report Date: 1/ 6/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch
Benzene	ug/kg	< 0.0020	0.0580	0.0500	116.00	58. - 135.	5115
Chlorobenzene	ug/kg	< 0.0020	0.0530	0.0500	106.00	54. - 136.	5115
1,1-Dichloroethene	ug/kg	< 0.0020	0.0580	0.0500	116.00	58. - 138.	5115
Toluene	ug/kg	< 0.0020	0.0520	0.0500	104.00	56. - 135.	5115
Trichloroethene	ug/kg	< 0.0020	0.0550	0.0500	110.00	52. - 143.	5115

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Acetone	ug/kg	0.0500	0.0360	72.	70 - 130	5115
Benzene	ug/kg	0.0500	0.0530	106.	70 - 130	5115
Bromobenzene	ug/kg	0.0500	0.0510	102.	70 - 130	5115
Bromochloromethane	ug/kg	0.0500	0.0560	112.	70 - 130	5115
Bromoform	ug/kg	0.0500	0.0510	102.	70 - 130	5115
Bromomethane	ug/kg	0.0500	0.0420	84.	70 - 130	5115
2-Butanone	ug/kg	0.0500	0.0480	96.	70 - 130	5115
n-Butylbenzene	ug/kg	0.0500	0.0450	90.	70 - 130	5115
sec-Butylbenzene	ug/kg	0.0500	0.0510	102.	70 - 130	5115
t-Butylbenzene	ug/kg	0.0500	0.0510	102.	70 - 130	5115
Carbon disulfide	ug/kg	0.0500	0.0450	90.	70 - 130	5115
Carbon tetrachloride	ug/kg	0.0500	0.0510	102.	70 - 130	5115
Chlorobenzene	ug/kg	0.0500	0.0520	104.	70 - 130	5115
Chloroethane	ug/kg	0.0500	0.0400	80.	70 - 130	5115
Chloroform	ug/kg	0.0500	0.0520	104.	70 - 130	5115
Chloromethane	ug/kg	0.0500	0.0450	90.	70 - 130	5115
2-Chlorotoluene	ug/kg	0.0500	0.0490	98.	70 - 130	5115
4-Chlorotoluene	ug/kg	0.0500	0.0490	98.	70 - 130	5115
Dibromochloromethane	ug/kg	0.0500	0.0560	112.	70 - 130	5115
1,2-Dibromoethane	ug/kg	0.0500	0.0550	110.	70 - 130	5115
Dibromomethane	ug/kg	0.0500	0.0560	112.	70 - 130	5115
1,2-Dichlorobenzene	ug/kg	0.0500	0.0460	92.	70 - 130	5115
1,3-Dichlorobenzene	ug/kg	0.0500	0.0420	84.	70 - 130	5115
1,4-Dichlorobenzene	ug/kg	0.0500	0.0420	84.	70 - 130	5115
Dichlorodifluoromethane	ug/kg	0.0500	0.0580	116.	70 - 130	5115
1,1-Dichloroethane	ug/kg	0.0500	0.0500	100.	70 - 130	5115
1,2-Dichloroethane	ug/kg	0.0500	0.0510	102.	70 - 130	5115
1,1-Dichloroethene	ug/kg	0.0500	0.0500	100.	70 - 130	5115
cis-1,2-Dichloroethene	ug/kg	0.0500	0.0490	98.	70 - 130	5115
trans-1,2-Dichloroethene	ug/kg	0.0500	0.0500	100.	70 - 130	5115
1,2-Dichloropropane	ug/kg	0.0500	0.0520	104.	70 - 130	5115
1,3-Dichloropropane	ug/kg	0.0500	0.0530	106.	70 - 130	5115
1,1-Dichloropropene	ug/kg	0.0500	0.0510	102.	70 - 130	5115
cis-1,3-Dichloropropene	ug/kg	0.0500	0.0520	104.	70 - 130	5115
trans-1,3-Dichloropropene	ug/kg	0.0500	0.0520	104.	70 - 130	5115
Ethylbenzene	ug/kg	0.0500	0.0530	106.	70 - 130	5115

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Hexachlorobutadiene	ng/kg	0.0500	0.0460	92.	70 - 130	5115
2-Hexanone	ng/kg	0.0500	0.0560	112.	70 - 130	5115
Isopropylbenzene	ng/kg	0.0500	0.0520	104.	70 - 130	5115
4-Isopropyltoluene	ng/kg	0.0500	0.0490	98.	70 - 130	5115
4-Methyl-2-pentanone	ng/kg	0.0500	0.0540	108.	70 - 130	5115
Methylene chloride	ng/kg	0.0500	0.0420	84.	70 - 130	5115
Naphthalene	ng/kg	0.0500	0.0540	108.	70 - 130	5115
n-Propylbenzene	ng/kg	0.0500	0.0510	102.	70 - 130	5115
Styrene	ng/kg	0.0500	0.0520	104.	70 - 130	5115
1,1,1,2-Tetrachloroethane	ng/kg	0.0500	0.0530	106.	70 - 130	5115
1,1,2,2-Tetrachloroethane	ng/kg	0.0500	0.0520	104.	70 - 130	5115
Tetrachloroethene	ng/kg	0.0500	0.0530	106.	70 - 130	5115
Toluene	ng/kg	0.0500	0.0550	110.	70 - 130	5115
1,2,3-Trichlorobenzene	ng/kg	0.0500	0.0490	98.	70 - 130	5115
1,2,4-Trichlorobenzene	ng/kg	0.0500	0.0530	106.	70 - 130	5115
1,1,1-Trichloroethane	ng/kg	0.0500	0.0460	92.	70 - 130	5115
1,1,2-Trichloroethane	ng/kg	0.0500	0.0540	108.	70 - 130	5115
Trichloroethene	ng/kg	0.0500	0.0510	102.	70 - 130	5115
1,2,3-Trichloropropane	ng/kg	0.0500	0.0450	90.	70 - 130	5115
1,2,4-Trimethylbenzene	ng/kg	0.0500	0.0520	104.	70 - 130	5115
1,3,5-Trimethylbenzene	ng/kg	0.0500	0.0500	100.	70 - 130	5115
Vinyl chloride	ng/kg	0.0500	0.0460	92.	70 - 130	5115
Xylenes	ng/kg	0.1500	0.1610	107.	70 - 130	5115
Bromodichloromethane	ng/kg	0.0500	0.0540	108.	70 - 130	5115
Trichlorofluoromethane	ng/kg	0.0500	0.0450	90.	70 - 130	5115
BTU	BTU/lb	11400	11100	97.60	80 - 120	4895

Duplicates

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
BTU	BTU/lb	12700	12800	0.78	15	4895

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
Arsenic	< 0.10	ng/l	3952
Barium	< 1.00	ng/l	3952
Cadmium	< 0.100	ng/l	3952
Chromium	< 0.50	ng/l	3952
Lead	< 0.50	ng/l	3952
Mercury	< 0.010	ng/l	4477
Selenium	< 0.100	ng/l	3952
Silver	< 0.10	ng/l	3952
Benzene	< 0.10	ng/l	4201
Carbon tetrachloride	< 0.1	ng/l	4201

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
Chlorobenzene	< 0.10	ng/l	4201
Chloroform	< 0.100	ng/l	4201
1,2-Dichloroethane	< 0.10	ng/l	4201
1,1-Dichloroethene	< 0.10	ng/l	4201
Methylethylketone	< 1.0	ng/l	4201
Tetrachloroethene	< 0.1	ng/l	4201
Trichloroethene	< 0.10	ng/l	4201
Vinyl Chloride	< 0.1	ng/l	4201
Cresols	< 0.10	ng/l	4992
1,4-Dichlorobenzene	< 0.1	ng/l	4992
2,4-Dinitrotoluene	< 0.10	ng/l	4992
Hexachlorobenzene	< 0.10	ng/l	4992
Hexchlor-1,3-butadien	< 0.1	ng/l	4992
Hexachloroethane	< 0.1	ng/l	4992
Nitrobenzene	< 0.1	ng/l	4992
Pentachlorophenol	< 0.1	ng/l	4992
Pyridine	< 0.1	ng/l	4992
2,4,5-Trichlorophenol	< 0.10	ng/l	4992
2,4,6-Trichlorophenol	< 0.1	ng/l	4992
Acetone	< 0.0100	ng/kg	5115
Benzene	< 0.0020	ng/kg	5115
Bromobenzene	< 0.0020	ng/kg	5115
Bromochloromethane	< 0.0020	ng/kg	5115
Bromoform	< 0.0020	ng/kg	5115
Bromomethane	< 0.0100	ng/kg	5115
2-Butanone	< 0.0100	ng/kg	5115
n-Butylbenzene	< 0.0020	ng/kg	5115
sec-Butylbenzene	< 0.0020	ng/kg	5115
t-Butylbenzene	< 0.0020	ng/kg	5115
Carbon disulfide	< 0.0020	ng/kg	5115
Carbon tetrachloride	< 0.0020	ng/kg	5115
Chlorobenzene	< 0.0020	ng/kg	5115
Chloroethane	< 0.0020	ng/kg	5115
2-Chloroethylvinylether	< 0.0020	ng/kg	5115
Chloroform	< 0.0020	ng/kg	5115
Chloromethane	< 0.0100	ng/kg	5115
2-Chlorotoluene	< 0.0020	ng/kg	5115
4-Chlorotoluene	< 0.0020	ng/kg	5115
1,2-Dibromo-3-chloropropane	< 0.0020	ng/kg	5115
Dibromochloromethane	< 0.0020	ng/kg	5115
1,2-Dibromoethane	< 0.0020	ng/kg	5115
Dibromomethane	< 0.0020	ng/kg	5115
1,2-Dichlorobenzene	< 0.0020	ng/kg	5115
1,3-Dichlorobenzene	< 0.0020	ng/kg	5115
1,4-Dichlorobenzene	< 0.0020	ng/kg	5115
Dichlorodifluoromethane	< 0.0020	ng/kg	5115

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
1,1-Dichloroethane	< 0.0020	mg/kg	5115
1,2-Dichloroethane	< 0.0020	mg/kg	5115
1,1-Dichloroethene	< 0.0020	mg/kg	5115
cis-1,2-Dichloroethene	< 0.0020	mg/kg	5115
trans-1,2-Dichloroethene	< 0.0020	mg/kg	5115
1,2-Dichloropropane	< 0.0020	mg/kg	5115
1,3-Dichloropropane	< 0.0020	mg/kg	5115
2,2-Dichloropropane	< 0.0020	mg/kg	5115
1,1-Dichloropropene	< 0.0020	mg/kg	5115
cis-1,3-Dichloropropene	< 0.0020	mg/kg	5115
trans-1,3-Dichloropropene	< 0.0020	mg/kg	5115
Ethylbenzene	< 0.0020	mg/kg	5115
Hexachlorobutadiene	< 0.0020	mg/kg	5115
2-Hexanone	< 0.0100	mg/kg	5115
Isopropylbenzene	< 0.0020	mg/kg	5115
4-Isopropyltoluene	< 0.0020	mg/kg	5115
4-Methyl-2-pentanone	< 0.0100	mg/kg	5115
Methylene chloride	0.0030	mg/kg	5115
Naphthalene	< 0.0020	mg/kg	5115
n-Propylbenzene	< 0.0020	mg/kg	5115
Styrene	< 0.0020	mg/kg	5115
1,1,1,2-Tetrachloroethane	< 0.0020	mg/kg	5115
1,1,2,2-Tetrachloroethane	< 0.0020	mg/kg	5115
Tetrachloroethene	< 0.0020	mg/kg	5115
Toluene	< 0.0020	mg/kg	5115
1,2,3-Trichlorobenzene	< 0.0020	mg/kg	5115
1,2,4-Trichlorobenzene	< 0.0020	mg/kg	5115
1,1,1-Trichloroethane	< 0.0020	mg/kg	5115
1,1,2-Trichloroethane	< 0.0020	mg/kg	5115
Trichloroethene	< 0.0020	mg/kg	5115
1,2,3-Trichloropropane	< 0.0020	mg/kg	5115
1,2,4-Trimethylbenzene	< 0.0020	mg/kg	5115
1,3,5-Trimethylbenzene	< 0.0020	mg/kg	5115
Vinyl chloride	< 0.0020	mg/kg	5115
Xylenes	< 0.0020	mg/kg	5115
Bromodichloromethane	< 0.0020	mg/kg	5115
Trichlorofluoromethane	< 0.0020	mg/kg	5115

COPY 1

SPECIALIZED ASSAYS ENVIRONMENTAL
2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

ENVIRONMENTAL QUALITY MGMT. 6738
JACKIE DOAN
1310 KEMPER MEADOW DRIVE
CINCINNATI, OH 45240

Lab Number: 98-A165565

Sample ID: S2 GOOEY SOLID

Date Collected:

Project: 3141-22

Time Collected:

Project Name: MAPLE LAKE DRUM DUMP

Date Received: 12/30/98

Sampler: MARK DOUGLAS

Time Received: 9:00

State Certification:

Sample Type: Solid waste

Analyte	Result	Units	Report Limit	Qsn Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS										
Reactive Cyanide	ND	mg/kg	2.0	2.0	1	1/5/99	10:20	J.Temple	SW-846	5080
Reactive Sulfide	ND	mg/kg	20.0	20.0	1	1/5/99	10:20	J.Temple	SW-846	5080
pH	6.80	units			1	12/30/98	15:00	E. Maloy	9045	3620
Flash Point, Closed Cup	BLANKED AT OR BELOW 60F					12/31/98	11:00	D. Hrouzar	1010	4209

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Time	Analyst	Method
Arsenic	<0.10	mg/L	5.0	105	1/4/99	10:05	R. Kelley	6010B
Barium	<1.00	mg/L	100	96	1/4/99	10:05	R. Kelley	6010B
Cadmium	<0.100	mg/L	1.0	95	1/4/99	10:05	R. Kelley	6010B
Chromium	<0.50	mg/L	5.0	95	1/4/99	10:05	R. Kelley	6010B
Copper	<0.50	mg/L	N/A	101	1/4/99	10:05	R. Kelley	6010B
Lead	2.20	mg/L	5.0	97	1/4/99	10:05	R. Kelley	6010B
Mercury	<0.010	mg/L	0.20	93	1/4/99	10:01	R. Kelley	7470A
Selenium	<0.100	mg/L	1.0	106	1/4/99	10:05	R. Kelley	6010B
Silver	<0.10	mg/L	5.0	103	1/4/99	10:05	R. Kelley	6010B
Zinc	20.9	mg/L	N/A	97	1/4/99	10:05	R. Kelley	6010B
Benzene	<0.10	mg/L	0.5	112	12/31/98	14:30	N. Hart	8260
Carbon tetrachloride	3.6	mg/L	0.5	86	12/31/98	14:30	N. Hart	8260
Chlorobenzene	<0.10	mg/L	100	92	12/31/98	14:30	N. Hart	8260
Chloroform	<0.100	mg/L	6.0	108	12/31/98	14:30	N. Hart	8260
1,2-Dichloroethane	<0.10	mg/L	0.5	109	12/31/98	14:30	N. Hart	8260
1,1-Dichloroethene	<0.10	mg/L	0.7	92	12/31/98	14:30	N. Hart	8260
Methylethylketone	152.	mg/L	200	86	12/31/98	14:30	N. Hart	8260
Tetrachloroethene	<0.1	mg/L	0.7	86	12/31/98	14:30	N. Hart	8260
Trichloroethene	<0.10	mg/L	0.5	92	12/31/98	14:30	N. Hart	8260
Vinyl Chloride	<0.1	mg/L	0.2	116	12/31/98	14:30	N. Hart	8260

PRELIMINARY DATA
- NOT VALIDATED

REVIEWED BY:

DATE: JAN 6 1999

SPECIALIZED ASSAYS ENVIRONMENTAL
2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

ENVIRONMENTAL QUALITY MGMT. 6738
JACKIE DUNN
1310 KEMPER MEADOW DRIVE
CINCINNATI, OH 45240

Lab Number: 98-A165565

Sample ID: S2 GOOEY SOLID

Date Collected:

Project: 3141-22

Time Collected:

Project Name: MAPLE LAKE DRUM DUMP

Date Received: 12/30/98

Sampler: MARK DOUGLAS

Time Received: 9:00

State Certification:

Sample Type: Solid waste

TCLP Results

Analyte	Result	Units	Rep Limit	Matrix Spike Recovery (%)	Date	Time	Analyst	Method
Cresols	<0.10	mg/L	200	66	1/6/99	10:03	Carmichael	8270
1,4-Dichlorobenzene	<0.1	mg/L	7.5	74	1/6/99	10:03	Carmichael	8270
2,4-Dinitrotoluene	<0.10	mg/L	0.13	80	1/6/99	10:03	Carmichael	8270
Hexachlorobenzene	<0.10	mg/L	0.13	26	1/6/99	10:03	Carmichael	8270
Hexachlor-1,3-butadien	<0.1	mg/L	0.5	72	1/6/99	10:03	Carmichael	8270
Hexachloroethane	<0.1	mg/L	3.0	58	1/6/99	10:03	Carmichael	8270
Nitrobenzene	<0.1	mg/L	2.0	66	1/6/99	10:03	Carmichael	8270
Pentachlorophenol	<0.1	mg/L	100	52	1/6/99	10:03	Carmichael	8270
Pyridine	<0.1	mg/L	5.0	44	1/6/99	10:03	Carmichael	8270
2,4,5-Trichlorophenol	<0.10	mg/L	400	74	1/6/99	10:03	Carmichael	8270
2,4,6-Trichlorophenol	<0.1	mg/L	2.0	82	1/6/99	10:03	Carmichael	8270
TCLP Extraction	Completed				12/30/98	16:00	E. Mabry	1311
Zero Headspace Extraction	Completed				12/30/98	16:00	E. Mabry	1311

ND = Not detected at the report limit.

TCLP preparation follows method 1311, SW-846 Revision 3.

Flash point/ignitability reported to the nearest 10 deg F.

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	115.	60. - 138.
VOA Surrogate, Toluene d8	87.	80. - 123.
VOA Surrogate, 4-Bromofluorobenzene	103.	73. - 122.
surr-Nitrobenzene-d5	72.	15. - 105.
surr-2-Fluorobiphenyl	72.	17. - 110.
surr-Terphenyl d14	65.	10. - 116.
surr-Phenol d5	30.	10. - 100.
surr-2-Fluorophenol	46.	9. - 100.

PRELIMINARY DATA
- NOT VALIDATED

REVIEWED BY:

DATE: JAN 6 1999

Environmental Quality Management, Inc.

1386 Wentworth Ave

Calumet City, IL 60409

Fax Cover Sheet

To: Walter Nied

Company: USEPA

Phone:

Fax:

From: **Mark E. Douglas**
Transportation and Disposal Coordinator/Response Manager

Phone: **708-891-5094**

Fax: **708-891-5095**

Date: 1-22-99

Number of pages : 3

Comments:

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR THE ENTITY TO WHOM IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THIS MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSIMULATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US VIA THE U.S. POSTAL SERVICE. WE APPRECIATE YOUR COOPERATION.