

**ENGINEERING INVESTIGATION AT
INACTIVE HAZARDOUS WASTE SITES
IN THE STATE OF NEW YORK**

**PRELIMINARY SITE ASSESSMENT
VOLUME 2: APPENDICES**

Erwin Town Landfill Site
Site Number 851003
Town of Erwin, Steuben County

May 1995



Prepared for:

**NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
50 Wolf Road, Albany, New York 12232
Langdon Marsh, Commissioner**

**Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., Director**



ecology and environment engineering, p.c.

BUFFALO CORPORATE CENTER 368 Pleasantview Drive, Lancaster, New York 14086
Tel: 716/684-8060, Fax: 716/684-0844

recycled paper

DRILLING LOG OF WELL NO. AMW-1

Page 1 of 1

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Total Depth of Hole (feet BGS): 8.0

Location: TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Ground Elevation (feet above MSL): 941.62

Well Coordinates/Reference System: N 4632.1000
E 3749.8953

Inner Casing Stick-Up (feet above GS): NA

Date Started/Finished: 10-4-93 / 10-4-93

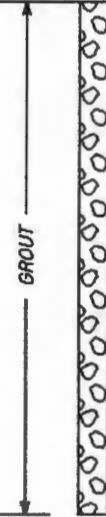
Groundwater Depth (feet BGS):

Drilling Company: AMERICAN AUGER AND DITCHING

Date Of Water Level Meas.: NA

Driller/Geologist: LEE PENROD / GREG ANDRUS

Water Level: NA

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HMU/OVA (ppm)	COMMENTS
gs elevation 941.62 ft.			ground surface (gs)					
1			0.0-2.0' FILL: tan to brown silt with some fine-grained sand, little medium to fine gravel, and trace clay. Moist.	SS-1	5 4 4 12	0.5	0/0	
2			2.0-5.0' No sample.					
3								
4								
5								
6			5.0-7.0' FILL: brown to dark brown coarse, medium and fine sand and little silt with unknown gray fill material and plastic.	SS-2	5 18 20 23	2.0	50/80	Sampled fill from 6.0-8.0' for EP toxicity metals analysis.
7								
8								Boring terminated due to presence of fill.
9								Boring grouted from 8.0' BGS to grade.
10								
11								
12								
13								
14								
15								



TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Ecology and Environment Engineering, P.C.

ecology and environment

ERWIN-WL

DRILLING LOG OF WELL NO. MW-1

Page 1 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Location: TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Well Coordinates/Reference System: N 4713.8723
E 3817.8237

Date Started/Finished: 10-7-93 / 10-7-93

Drilling Company: AMERICAN AUGER AND DITCHING

Driller/Geologist: LEE PENROD / GREG ANDRUS

Total Depth of Hole (feet BGS): 22.0

Ground Elevation (feet above MSL): 939.05

Inner Casing Stick-Up (feet above GS): 2.08

Groundwater Depth (feet BGS):

Date Of Water Level Meas.: 14 NOV 1993

Water Level: 15.37

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNU/OVA (ppm)	COMMENTS
gs elevation 939.05 ft.			ground surface (gs)					
1			0.0-2.0' SILT: tan, little fine sand, trace coarse to medium sand, trace clay, moist.	SS-1	8 11 14	2.0	0/0	
2			No sample.					
3								
4								
5			5.0-7.0' SAND: tan, medium to fine grained, some fine to coarse gravel, little coarse sand, trace silt, moist.	SS-2	3 8 12 11	1.5	0/3.5	
6			No sample.					
7								
8								
9								
10			10.0-12.0' GRAVEL and SAND: tan to brown, gravel is fine to medium grained, sand is fine to coarse grained, little silt, wet.	SS-3	8 3 5 2	0.5	0/8	
11								
12			12.0-14.0' GRAVEL and SAND: tan to dark brown, gravel and sand are fine to coarse grained, trace silt, some cobbles coming up with augers, moist.	SS-4	18 35 30 32	1.0	0/80	
13								
14			14.0-18.0' GRAVEL: tan to brown, with some sand, and little silt. Gravel and	SS-5	8 10	1.0	0/4	
15								

TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Ecology and Environment Engineering, P.C.

DRILLING LOG OF WELL NO. MW-1

Page 2 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Total Depth of Hole (feet BGS): 22.0

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HI/LO/OVA (ppm)	COMMENTS
16			sand are fine to coarse grained, wet.		20 21			Collected sample from 14.0-18.0' BGS for grain-size analysis.
17			16.0-20.0' Same as above 14.0-18.0', wet.	SS-6	28 50 35 20	2.0	0/25	Collected sample from 16.0-18.0' BGS for full TCL analysis.
18								
19				SS-7	40 50 50 28	1.0	0/40	
20			No sample.					2-inch ID PVC screen, with 0.010-inch slot set from 11.0-21.0' BGS. Sandpack (#0) from 10.0-22.0' BGS. Bentonite seal from 8.0-10.0' BGS. Grout from 10.0' BGS to grade. Five foot length of 4-inch locked steel protective casing (Master lock #3252).
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								



TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Ecology and Environment Engineering, P.C.

ecology and environment

ERWIN-WL

DRILLING LOG OF WELL NO. MW-2

Page 1 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Location: TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Well Coordinates/Reference System: N 5083.7493
E 4482.2578

Date Started/Finished: 10-4-93 / 10-5-93

Drilling Company: AMERICAN AUGER AND DITCHING

Driller/Geologist: LEE PENROD / GREG ANDRUS

Total Depth of Hole (feet BGS): 18.0

Ground Elevation (feet above MSL): 935.77

Inner Casing Stick-Up (feet above GS): 2.25

Groundwater Depth (feet BGS):

Date Of Water Level Meas.: 14 NOV 1993

Water Level: 11.41

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HMU/OVA (ppm)	COMMENTS
gs elevation 935.77 ft.								
1			ground surface (gs)					
2			0.0-2.0' SAND: tan to dark brown, medium grained sand, with trace silt. High organic content (topsoil), moist.	SS-1	1 100 100 2	2.0	2/0.4	
3			No sample. Some wire present in cuttings.					
4								
5			5.0-7.0' SAND: tan to dark brown, medium to fine grained sand, little silt, trace of gravel, moist.	SS-2	7 2 1 1	1.0	0/18	
6								
7			7.0-9.0' SAND: dark brown, medium to fine grained, with little silt, wet.	SS-3	3 15 19 7	<0.1	0/100	
8								
9			9.0-10.0' SAND: dark brown, fine to medium grained, with some silt in upper 6" of sample, wet.	SS-4	3 5 8 11	1.0	0/3000	
10			10.0-13.0' SILT: tan, little clay, little medium gravel, moist from 10.0-11.0', wet from 11.0-13.0'.	SS-5	12 40 15 30	0.5	0/1000	Collected sample from 11.0- BGS for TCL VOC analysis.
11								
12			13.0-15.0' SILT: brown, similar to 10.0-13.0', but with slightly more gravel.	SS-6	40 12 9 15	<0.1	0/400	Collected sample from 13.0-15.0' BGS for grain-size analysis.
13								
14								
15								

TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Ecology and Environment Engineering, P.C.

C-6

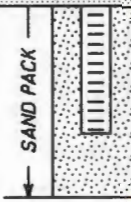
ENV-11

DRILLING LOG OF WELL NO. MW-2

Page 2 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Total Depth of Hole (feet BGS): 18.0

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNu/OVA (ppm)	COMMENTS
16			15.0-18.0 <u>SAND</u> ; brown, fine to coarse grained, some gravel, some silt.	SS-7	30 27 19 23	0.5	0/100	Collected sample from 15.0-15.0' BGS for full TCL analysis except VOCs.
17								
18								2-inch ID PVC screen with 0.010-inch slots set from 7.0-17.0' BGS. Sandpack (#0) from 8.0-18.0' BGS. Bentonite seal from 4.0-8.0' BGS. Grout from 4.0' BGS to grade. Five foot length of 4-inch locked steel protective casing, (Master lock #3252)
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								



TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Ecology and Environment Engineering, P.C.

ecology and environment

ERWIN-WL

DRILLING LOG OF WELL NO. MW-3

Page 1 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Location: TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Well Coordinates/Reference System: N 5038.1773
E 4887.8314

Date Started/Finished: 10-5-93 / 10-5-93

Drilling Company: AMERICAN AUGER AND DITCHING

Driller/Geologist: LEE PENROD / GREG ANDRUS

Total Depth of Hole (feet BGS): 21.0

Ground Elevation (feet above MSL): 937.05

Inner Casing Stick-Up (feet above GS): 2.02

Groundwater Depth (feet BGS):

Date Of Water Level Meas.: 14 NOV 1993

Water Level: 14.38

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNu/OVA (ppm)	COMMENTS
gs elevation 937.05 ft.			ground surface (gs)					
1			0.0-2.0' SAND: brown to black, fine to coarse, with little gravel and trace silt, moist.	SS-1	4 4 8 11	2.0	0/0	
2			No sample.					
3								
4								
5			5.0-7.0' FILL: brown, tan and black, fine to coarse gravel and sand, little silt, with wood and glass fragments, moist.	SS-2	4 7 12 12	2.0	0/ 10,000	
6			No sample.					Collected sample from 5.0-7.0' BGS for TCL VOC analysis.
7								
8								
9								
10			10.0-12.0' FILL: brown, similar to 5.0-7.0', with larger glass fragments and with cobble fragments, moist to wet.	SS-3	17 5 7 12	<0.1	0/0	
11								
12			12.0-14.0' SAND: fine to coarse, wet.	SS-4	2 1 2 2	0.0	0/0	
13								
14			14.0-16.0' GRAVEL: brown and tan, fine to coarse,	SS-5	8 10	2.0	2/ 10,000	
15								



Ecology and Environment Engineering, P.C.

TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

DRILLING LOG OF WELL NO. MW-3

Page 2 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Total Depth of Hole (feet BGS): 21.0

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNu/OVA (ppm)	COMMENTS
16			some fine to coarse sand, little to some silt, wet.	18	18			Collected sample from 14.0-17.0' BGS for full TCL analysis except VOCs.
17			18.0-20.0' GRAVEL and SAND: brown and tan, fine to coarse-grained, with some silt, wet.	SS-8	8 25 37 20	1.0	0/200	
18								Collected sample from 18.0-20.0' BGS for grain-size analysis.
19				SS-7	37 35 28 32	2.0	0/200	
20								2-inch ID PVC screen with 0.010-inch slots set from 10.0-20.0' BGS. Sandpack (#0) from 8.0-21.0' BGS. Bentonite seal from 7.0-8.0' BGS. Grout from 7.0' BGS to grade. Five foot length of 4-inch locked steel protective casing (Master lock #3252).
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								

TOWN OF ERWIN, STEUBEN COUNTY, N.Y.



Ecology and Environment Engineering, P.C.

recycled paper

ecology and environment

ERWIN-M

DRILLING LOG OF WELL NO. MW-4

Page 1 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Location: TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Well Coordinates/Reference System: N 4912.4613
E 4816.1174

Date Started/Finished: 10-5-93 / 10-5-93

Drilling Company: AMERICAN AUGER AND DITCHING

Driller/Geologist: LEE PENROD / GREG ANDRUS

Total Depth of Hole (feet BGS): 22.0

Ground Elevation (feet above MSL): 934.75

Inner Casing Stick-Up (feet above GS): 2.48

Groundwater Depth (feet BGS):

Date Of Water Level Meas.: 14 NOV 1993

Water Level: 12.81

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNU/OVA (ppm)	COMMENTS
gs elevation 934.75 ft.			ground surface (gs)					
1			0.0-1.5' LOAM ; dark brown, high in organic material, moist.	SS-1	8 5 7 8	0.4	0/0	
2			1.5-2.0' SAND ; brown, with little gravel and cobbles, moist.					
3			No sample.					
4								
5								
6			5.0-7.0' GRAVEL and SAND ; brown, fine to coarse-grained with trace of silt, moist.	SS-2	45 17 10 10	<0.20/1000		
7								
8			7.0-9.0' SAND and SILT ; brown, little fine to medium gravel, moist.	SS-3	15 11 11 15	0.4	5/100	
9			No sample.					
10								
11			10.0-16.0' SAND and SILT ; brown, fine to coarse sand, little fine to medium gravel, wet.	SS-4	11 10 14 23	2.0	14/50	Collected sample from 10.0-12.0' BGS for TCI VOC analysis. HNU reading probably due to interference from moisture.
12								
13				SS-5	18 15 10 15	0.4	0/20	
14								
15				SS-6	10 29	1.0	9/300	Collected sample from 14.0-16.0' BGS for grain-size analysis.

TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Ecology and Environment Engineering, P.C.

ERWIN-WL

DRILLING LOG OF WELL NO. MW-4

Page 2 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Total Depth of Hole (feet BGS): 22.0

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNu/OVA (ppm)	COMMENTS
16			16.0-21.0' GRAVEL and SAND; brown, fine to coarse, some silt, wet.		38 17			Collected sample from 16.0-18.0' BGS for full TCL analysis except VOCs.
17				SS-7	38 40 40 45	1.5	0/10	
18								
19				SS-8	48 50/ 5"	2.0	0/80	2-inch ID PVC screen, with 0.010-inch slot set from 11.0-21.0' BGS. Sandpack (#0) from 10.0-22.0' BGS. Bentonite seal from 8.0-10.0' BGS. Grout from 8.0' BGS to grade. Five foot length of 4-inch locked steel protective casing (Master lock #3252).
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								



TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Ecology and Environment Engineering, P.C.

ecology and environment

ERWIN-WL

DRILLING LOG OF WELL NO. MW-5

Page 1 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Location: TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Well Coordinates/Reference System: N 4678.9084
E 4818.5292

Date Started/Finished: 10-6-93 / 10-7-93

Drilling Company: AMERICAN AUGER AND DITCHING

Driller/Geologist: LEE PENROD / GREG ANDRUS

Total Depth of Hole (feet BGS): 19.0

Ground Elevation (feet above MSL): 933.00

Inner Casing Stick-Up (feet above GS): 1.88

Groundwater Depth (feet BGS):

Date Of Water Level Meas.: 14 NOV 1993

Water Level: 10.29

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HMU/OVA (ppm)	COMMENTS
gs elevation 933.00 ft.			ground surface (gs)					
1			0.0-2.0' <u>LOAM</u> : fine to coarse sand and silt, trace gravel, moist.	SS-1	8 4 1	0.5	0/0	Miscellaneous trash coming up with augers between 2.0-5.0' BGS.
2			No sample.					
3								Collected sample from 8.0-10.0' BGS for TCL VOC analysis.
4								
5			5.0-7.0' <u>SAND</u> : brown to black, fine to medium grained, with trace coarse sand, and trace silt. moist.	SS-2	15 10 12 20	1.5	0/0.18	
6			No sample.					
7								
8			8.0-10.0' <u>SAND and CLAY</u> : brown to black, fine to medium grained, some silt. Wood/root fragments, apparently native, wet.	SS-3	3 3 9 20	2.0	0/100	
9								
10			10.0-19.0' <u>GRAVEL and SAND</u> : tan to brown, fine to coarse grained, some silt, wet.	SS-4	3 8 8 7	2.0	0/10	
11								
12								
13				SS-5	7 3 1 1	<0.2	0/0.02	
14								
15				SS-6	1 1 1	2.0	0/3	

TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

DRILLING LOG OF WELL NO. MW-5

Page 2 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Total Depth of Hole (feet BGS): 19.0

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNu/OVA (ppm)	COMMENTS
16					1 3			Collected sample from 14.0-18.0' BGS for full TCL analysis except VOCs.
17				SS-7	34 50/ 3"	2.0	0/30	Collected sample from 18.0-18.0' BGS for grain-size analysis.
18								
19								2-inch ID PVC screen with 0.010-inch slots set from 8.0-18.0' BGS. Sandpack (#0) from 7.0-18.0' BGS. Bentonite seal from 5.0-7.0' BGS. Grout from 5.0' BGS to grade. Five foot length of 4-inch locked steel protective casing (Master lock #3252).
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								

TOWN OF ERWIN, STEUBEN COUNTY, N.Y.



Ecology and Environment Engineering, P.C.

ecology and environment

ERWIN-WL

DRILLING LOG OF WELL NO. MW-6

Page 1 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Location: TOWN OF ERWIN, STEUBEN COUNTY, N.Y.

Well Coordinates/Reference System: N 4167.3247
E 4244.6805

Date Started/Finished: 10-8-93 / 10-8-93

Drilling Company: AMERICAN AUGER AND DITCHING

Driller/Geologist: LEE PENROD / GREG ANDRUS

Total Depth of Hole (feet BGS): 19.0

Ground Elevation (feet above MSL): 931.72

Inner Casing Stick-Up (feet above GS): 2.20

Groundwater Depth (feet BGS):

Date Of Water Level Meas.: 14 NOV 1993

Water Level: 7.65

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNu/OVA (ppm)	COMMENTS
us elevation 931.72 ft.								
			ground surface (gs)					
1			0.0-2.0' SILT and SAND : brown, sand is fine grained, with trace of clay, coarse sand, and fine gravel, moist.	SS-1	3 8 12	2.0	0/0	
2			No sample.					
3								
4			4.0-6.0' SILT : brown to gray, some clay, and trace fine sand, moist.	SS-2	6 4 5	2.0	0/0	
5			No sample.					
6								
7								
8								
9			9.0-10.0' SILT : Same as 4.0-6.0', moist.	SS-3	4 13 2 4	2.0	0/2.5	Collected sample from 8.0-11.0' BGS for grain-size analysis.
10			10.0-19.0' GRAVEL and SAND : brown, fine to coarse, with some silt, wet, with silt lenses at 14.0' and 17.5-18.5'.	SS-4	2 2 4 4	2.0	0/0	Collected sample from 11.0-13.0' BGS for full TCL analysis.
11								
12								
13								
14								
15								

TOWN OF ERWIN, STEUBEN COUNTY, N.Y.



Ecology and Environment Engineering, P.C.

ERWIN-M

DRILLING LOG OF WELL NO. MW-6

Page 2 of 2

Project: ERWIN TOWN LANDFILL - SITE ID 851003

Total Depth of Hole (feet BGS): 19.0

ELEVATION DEPTH	WELL COMPLETION DIAGRAM	GRAPHIC LOG	SOIL/ROCK DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNU/OVA (ppm)	COMMENTS
16				SS-8	8 8 13 3	2.0	0/2	2-inch ID PVC screen with 0.010-inch slots set from 8.0-18.0' BGS. Sandpack (#0) from 7.0-19.0' BGS. Bentonite seal from 4.0-7.0' BGS. Grout from 4.0' BGS to grade. Five foot length of 4-inch locked steel protective casing (Master lock #3252)
17				SS-7	10 38 50 5"	2.0	0.5/0	
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								

TOWN OF ERWIN, STEUBEN COUNTY, N.Y.



Ecology and Environment Engineering, P.C.

ecology and environment

ERWIN-WL

APPENDIX A

EPA 2070-13 SITE INSPECTION FORM

A-1

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 State

NY

02 Site Number

851003

II. SITE NAME AND LOCATION

01 Site Name (legal, common, or descriptive name of site)

Erwin Town Landfill

02 Street, Route No., or specific location identifier

County Road 107 (Canada Road)

03 City

Village of Painted Post

04 State

NY

05 Zip Code

14830

06 County

Steuben

07 County Code

101

08 Cong. Dist.

34

09 Coordinates

Latitude

42° 09' 05" N

Longitude

77° 05' 50" W

10 Type of Ownership (check one)

☐ A. Private ☐ B. Federal ☐ C. State ☐ D. County
☐ E. Municipal ☒ F. Other Town ☐ G. Unknown

III. INSPECTION INFORMATION

01 Date of Inspection

 8 / 6 / 93
 Month Day Year

02 Site Status

☐ Active
☒ Inactive

03 Years of Operation

 1966 | 1983 ☐ Unknown
 Beginning Year Ending Year

04 Agency Performing Inspection (check all that apply)

☐ A. EPA ☐ B. EPA Contractor (name of firm) ☐ C. Municipal ☐ D. Municipal Contractor (name of firm)
☐ E. State ☒ F. State Contractor Ecology and Environment Engineering, P.C. (name of firm) ☐ G. Other (specify)

05 Chief Inspector

Jim Richert

06 Title

Geologist

07 Organization

Ecology and Environment Engineering, P.C.

08 Telephone No.

(716) 684-8060

09 Other Inspectors

Chad Eich

10 Title

Biologist

11 Organization

Ecology and Environment Engineering, P.C.

12 Telephone No.

(716) 684-8060

Valerie Woodward

Senior Engineering Geologist

NYSDEC, Albany

(518) 457-9538

Greg Sinton

Joseph C. Lu, P.E., P.C.

(716) 377-1450

Jim MacKenzie

Joseph C. Lu, P.E., P.C.

(716) 377-1450

13 Site Representatives Interviewed

Howard Houghtaling

14 Title

Highway Superintendent

15 Address

Erwin Town Hall
Painted Post, NY 14870

16 Telephone No.

(716) 962-7021

Rita McCarthy

Town Manager

Erwin Town Hall
Painted Post, NY 14870

(716) 962-7021

17 Access Gained by (check one)

☒ Permission
☐ Warrant

18 Time of Inspection

8:00 am 8/6/93

19 Weather Conditions

80°F, sunny

IV. INFORMATION AVAILABLE FROM

01 Contact

Valerie Woodward

02 Of (Agency/Organization)

NYSDEC, Albany

03 Telephone No.

(518) 457-9538

Manmohan Mehta

NYSDEC, Region 8

(716) 226-2466

04 Person Responsible for Site Inspection Form

Rick Watt

05 Agency

06 Organization

E & E

07 Telephone No.

(716) 684-8060

08 Date

 5 / 16 / 94
 Month Day Year

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 State

NY

02 Site Number

851003

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. Groundwater Contamination03 Population Potentially Affected 19,60102 ☒ Observed (date 11/5/94)☐ Potential ☐ Alleged

04 Narrative Description:

Municipal community wells and private wells provide source of potable water for population in area. Landfill not lined; no leachate collection system present. On-site monitoring wells contain organic and inorganic contaminants above NYSDEC standards.

01 ☒ B. Surface Water Contamination03 Population Potentially Affected 19,77102 ☐ Observed (date _____)☒ Potential ☐ Alleged

04 Narrative Description:

The Cohocton River lies approximately 350 feet to the north. The Tioga River lies approximately 550 feet to the east. Both surface water bodies are used for recreation. Approximately 19,771 persons within 3 miles of site. Runoff to rivers is restricted by flood levees.

01 ☐ C. Contamination of Air

03 Population Potentially Affected _____

02 ☐ Observed (date _____)☐ Potential ☐ Alleged

04 Narrative Description:

None reported.

01 ☒ D. Fire/Explosive Conditions03 Population Potentially Affected 11,77402 ☒ Observed (date 9/7/80)☒ Potential ☐ Alleged

04 Narrative Description:

A fire of unknown origin occurred at the facility in 1980. Population figure reflects approximate number of persons within 2-mile radius of site.

01 ☒ E. Direct Contact03 Population Potentially Affected 3,24302 ☐ Observed (date _____)☒ Potential ☐ Alleged

04 Narrative Description:

The site is only partially fenced and is accessible. Approximately 3,243 persons within 1 mile of site.

01 ☒ F. Contamination of Soil03 Area Potentially Affected 13 acres02 ☐ Observed (date _____)☒ Potential ☐ Alleged

04 Narrative Description:

Potential for soil contamination prior to placement of final cover at site in 1983. Exposed waste and leachate outbreaks observed.

01 ☒ G. Drinking Water Contamination03 Population Potentially Affected 19,60102 ☐ Observed (date _____)☒ Potential ☐ Alleged

04 Narrative Description:

Municipal and private wells provide sole source of potable water for population in area. On-site water supply well contains metals above NYSDEC standards, but it has not been determined that their presence is site related.

01 ☒ H. Worker Exposure/Injury03 Workers Potentially Affected 302 ☐ Observed (date _____)☒ Potential ☐ Alleged

04 Narrative Description:

Water supply well at wastewater treatment plant is directly downgradient of landfill. Three workers at this plant.

01 ☒ I. Population Exposure/Injury03 Population Potentially Affected 19,77102 ☐ Observed (date _____)☒ Potential ☐ Alleged

04 Narrative Description:

Population within a 3-mile radius can potentially be affected. Potential groundwater and surface water contamination.

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT		I. IDENTIFICATION	
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS		01 State NY	02 Site Number 851003

II. HAZARDOUS CONDITIONS AND INCIDENTS (Cont.)			
01 ☒ J. Damage to Flora 04 Narrative Description: None reported.	02 ☒ Observed (date <u>8/6/93</u>)	☐ Potential ☐ Alleged	
01 ☒ K. Damage to Fauna 04 Narrative Description: A dead song bird was present within a glue-like substance adjacent to a partially exposed drum in the leachate outbreak, southwest of the landfill.	02 ☒ Observed (date <u>8/6/93</u>)	☐ Potential ☐ Alleged	
01 ☐ L. Contamination of Food Chain 04 Narrative Description: None reported.	02 ☐ Observed (date _____)	☐ Potential ☐ Alleged	
01 ☒ M. Unstable Containment of Wastes (spills/ runoff/standing liquids, leaking drums) 03 Population Potentially Affected: <u>19,771</u> 04 Narrative Description: (Approximate population within 3-mile radius.) Wastes disposed of in unlined landfill, no leachate collection system, no diversion system for surface runoff. Leachate was observed during site inspection. Exposed drum present.	02 ☐ Observed (date _____)	☒ Potential ☐ Alleged	
01 ☒ N. Damage to Off-site Property 04 Narrative Description: None reported.	02 ☒ Observed (date <u>8/6/93</u>)	☐ Potential ☐ Alleged	
01 ☐ O. Contamination of Sewers, Storm Drains, WWTPs 04 Narrative Description:	02 ☐ Observed (date _____)	☐ Potential ☐ Alleged	
01 ☒ P. Illegal/Unauthorized Dumping 04 Narrative Description: Unauthorized dumping of several drums along the western edge of the landfill as reported by Erwin Town officials. Drums sampled by E & E in the spring of 1994.	02 ☒ Observed (date <u>8/6/93</u>)	☐ Potential ☐ Alleged	
05 Description of Any Other Known, Potential, or Alleged Hazards None known.			
III. TOTAL POPULATION POTENTIALLY AFFECTED <u>Approximately 19,771 persons within 3-mile radius.</u>			
IV. COMMENTS Municipal community wells and private wells provide source of potable water for population in area. No groundwater sampling data available.			
V. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)			
NYSDEC - Region 8 Surface Soil Sampling, 1993 Town of Erwin, NY PSA Task 1 Report, 1992			

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT		I. IDENTIFICATION		
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION		01 State NY	02 Site Number 851003	
II. PERMIT INFORMATION				
01 Type of Permit Issued (check all that apply)	02 Permit Number	03 Date Issued	04 Expiration Date	05 Comments
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA Interim Status				
☐ F. SPCC Plan				
☒ G. State (specify) NY				Solid Waste, Part 360 permit
☐ H. Local (specify)				
☐ I. Other (specify)				
☐ J. None				
III. SITE DESCRIPTION				
01 Storage Disposal (check all that apply)	02 Amount	03 Unit of Measure	04 Treatment (check all that apply)	05 Other
☐ A. Surface Impoundment	_____	_____	☐ A. Incineration	☒ Buildings On Site
☐ B. Piles	_____	_____	☐ B. Underground Injection	
☐ C. Drum, Aboveground	_____	_____	☐ C. Chemical/Physical	
☐ D. Tank, Aboveground	_____	_____	☐ D. Biological	
☐ E. Tank, Belowground	_____	_____	☐ E. Waste Oil Processing	
☒ F. Landfill	173,000	cu. yds.	☐ F. Solvent Recovery	06 Area of Site
☐ G. Landfarm	_____	_____	☐ G. Other Recycling Recovery	13 Acres
☐ H. Open Dump	_____	_____	☐ H. Other (specify)	
☐ I. Other (specify)				
07 Comments				
Industrial wastes accepted from 1978-1980, including approximately 75 tons/day of foundry wastes and up to 162.5 cu. yds/day of ceramic logs containing "methocel," inorganics and heavy metals (EPA hazardous wastes D004 through D011).				
IV. CONTAINMENT				
01 Containment of Wastes (check one)				
☐ A. Adequate, Secure ☐ B. Moderate ☒ C. Inadequate, Poor ☐ D. Insecure, Unsound, Dangerous				
02 Description of Drums, Diking, Liners, Barriers, etc.				
Wastes contained in landfill are exposed; no liner or leachate collection system present; no diversion system for surface runoff present.				
V. ACCESSIBILITY				
01 Waste Easily Accessible ☐ Yes ☒ No				
02 Comments				
Facility is only partially fenced; however, final cover was added in 1983.				
VI. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)				
Town of Erwin, NY NYSDEC Region 8				

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT		I. IDENTIFICATION	
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA		01 State NY	02 Site Number 851003

VI. ENVIRONMENTAL INFORMATION			
01 Permeability of Unsaturated Zone (check one)			
☐ A. Impermeable (less than 10^{-6} cm/sec)	☐ B. Relatively Impermeable (10^{-4} - 10^{-6} cm/sec)	☒ C. Relatively Permeable (10^{-2} - 10^{-4} cm/sec)	☐ D. Very Permeable (greater than 10^{-2} cm/sec)
02 Permeability of Bedrock (check one)			
☐ A. Impermeable (less than 10^{-6} cm/sec)	☒ B. Relatively Impermeable (10^{-4} - 10^{-6} cm/sec)	☐ C. Relatively Permeable (10^{-2} - 10^{-4} cm/sec)	☐ D. Very Permeable (greater than 10^{-2} cm/sec)
03 Depth to Bedrock 90 (ft)	04 Depth of Contaminated Soil Zone (ft)		05 Soil pH _____
06 Net Precipitation 7.8 (in)	07 One Year 24-Hour Rainfall 2.3 (in)	08 Slope Site Slope Direction of Site Slope Terrain Average Slope 0-1 % radial 0-1 %	
09 Flood Potential Site was flooded in 1971. Site is in 100 Year Floodplain		10 ☐ Site is on Barrier Island, Coastal High Hazard Area, Riverine Floodway	
11 Distance to Wetlands (5 acre minimum) ESTUARINE OTHER A. _____ (mi) B. 10.5 (mi)		12 Distance to Critical Habitat (of endangered species) _____ (mi) Endangered Species: None within 1 mile.	
13 Land Use in Vicinity Distance to:			
COMMERCIAL/INDUSTRIAL RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES AGRICULTURAL LANDS PRIME AG LAND AG LAND			
A. 0.2 (mi)	B. 0.3 (mi)	C. 0.4 (mi)	D. 0.4 (mi)
14 Description of Site in Relation to Surrounding Topography The grass-covered site is mounded to a height of approximately 50 feet above the natural ground surface. The topography of the surrounding area is relatively flat with the exception of the elevated levee system adjacent to the site.			
VII. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)			
United States Army Engineers, Baltimore Section, Mr. Davis Ditman, Chief, Dams & Levee Section Telecon. 1/20/89 Climatic Atlas of the United States, 1979, United States Department of Commerce USGS 7.5 minute series topographic maps (Campbell, NY 1978; Corning, NY, 1969; Canton, NY, 1969; Addison, NY, 1976 Quadrangles) New York State Museum and Science Service - map and chart series 15 and 40 Steuben County Soil Conservation Service Atlas of 11 Selected Aquifers in New York, USGS open file report 82-553			

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 6 - SAMPLE AND FIELD INFORMATION		I. IDENTIFICATION	
		01 State NY	02 Site Number 851003

II. SAMPLES TAKEN			
Sample Type	01 Number of Samples Taken	02 Samples Sent To	03 Estimated Date Results Available
Groundwater	7	E & E's ASC	2/94
Surface Water	5	E & E's ASC	10/93
Waste (drum)	1	E & E's ASC	10/93
Air	—		
Runoff	—		
Spill	—		
Soil/Sed.	18	E & E's ASC	
Vegetation	—		10/93 and 12/93
Other Leachate	—		

III. FIELD MEASUREMENTS TAKEN	
01 Type	02 Comments
HNu	50 ppm from 4'-6' soil sample from AMW-1
Minirad	No readings above background levels
OVA	> 10,000 ppm at MW-2 during groundwater sampling (probably methane)

IV. PHOTOGRAPHS AND MAPS	
01 Type ☒ Ground ☐ Aerial	02 In Custody of <u>Ecology and Environment Engineering, P.C.</u> (name of organization or individual)

03 Maps ☒ Yes ☐ No	04 Location of Maps <u>Ecology and Environment Engineering, P.C., 368 Pleasantview Drive Lancaster, New York 14086</u>
---	---

V. OTHER FIELD DATA COLLECTED (provide narrative description of sampling activities)
None

VI. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)
Site Inspection May 3, 1991 Site Sampling, 1993

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 7 - OWNER INFORMATION				I. IDENTIFICATION			
				01 State NY		02 Site Number 851003	
II. CURRENT OWNER(S)				PARENT COMPANY (if applicable)			
01 Name Town of Erwin		02 D&B Number		08 Name		09 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.) Erwin Town Hall		04 SIC Code		10 Street Address (P.O. Box, RFD #, etc.)		11 SIC Code	
05 City Painted Post		06 State NY		07 Zip Code 14870		12 City	
						13 State	
						14 Zip Code	
01 Name		02 D&B Number		08 Name		09 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		10 Street Address (P.O. Box, RFD #, etc.)		11 SIC Code	
05 City		06 State		07 Zip Code		12 City	
						13 State	
						14 Zip Code	
01 Name		02 D&B Number		08 Name		09 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		10 Street Address (P.O. Box, RFD #, etc.)		11 SIC Code	
05 City		06 State		07 Zip Code		12 City	
						13 State	
						14 Zip Code	
III. PREVIOUS OWNER(S) (list most recent first)				IV. REALTY OWNER(S) (if applicable, list most recent first)			
01 Name		02 D&B Number		01 Name		02 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code	
05 City		06 State		05 City		06 State	
01 Name		02 D&B Number		01 Name		02 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code	
05 City		06 State		05 City		06 State	
V. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)							
NYSDEC - Region 8 Town of Erwin, NY							

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 8 - OPERATOR INFORMATION				I. IDENTIFICATION	
				01 State NY	02 Site Number 851003
II. CURRENT OPERATOR (provide if different from owner)				OPERATOR'S PARENT COMPANY (if applicable)	
01 Name Facility Inactive		02 D&B Number		10 Name	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		11 D&B Number	
05 City		06 State		12 Street Address (P.O. Box, RFD #, etc.)	
07 Zip Code		13 SIC Code		14 City	
08 Years of Operation		09 Name of Owner		15 State	
06 State		07 Zip Code		16 Zip Code	
III. PREVIOUS OPERATOR(S) (list most recent first; provide if different from owner)				PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)	
01 Name Steuben County		02 D&B Number		10 Name	
03 Street Address (P.O. Box, RFD #, etc.) 117 East Steuben Street		04 SIC Code		11 D&B Number	
05 City Bath		06 State NY		12 Street Address (P.O. Box, RFD #, etc.)	
07 Zip Code 14810		13 SIC Code		14 City	
08 Years of Operation 1978-1983		09 Name of Owner During this Period Town of Erwin		15 State	
01 Name Town of Erwin		02 D&B Number		16 Zip Code	
03 Street Address (P.O. Box, RFD #, etc.) Erwin Town Hall		04 SIC Code		10 Name	
05 City Painted Post		06 State NY		11 D&B Number	
07 Zip Code 14870		12 Street Address (P.O. Box, RFD #, etc.)		13 SIC Code	
08 Years of Operation 1966-1978		09 Name of Owner During this Period Town of Erwin		14 City	
01 Name		02 D&B Number		15 State	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		16 Zip Code	
05 City		06 State		07 Zip Code	
08 Years of Operation		09 Name of Owner During this Period			
IV. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)					
New York State Department of Environmental Conservation Region 8 files United States Environmental Protection Agency Region II Files - NUS Corporation Report 02-8710-113-PA					

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 State

NY

02 Site Number

851003

II. ON-SITE GENERATOR

01 Name

02 D&B Number

03 Street Address (P.O. Box, RFD #, etc.)

04 SIC Code

05 City

06 State

07 Zip Code

III. OFF-SITE GENERATOR(S)

01 Name

Corning Glass Works

02 D&B Number

01 Name

Steuben County Highway Department

02 D&B Number

03 Street Address (P.O. Box, RFD #, etc.)
Houghton Park, ME-3

04 SIC Code

03 Street Address (P.O. Box, RFD #, etc.)
117 East Steuben Street

04 SIC Code

05 City

Corning

06 State

NY

07 Zip Code

14830

05 City

Bath

06 State

NY

07 Zip Code

14810

01 Name

Ingersoll Rand Company

02 D&B Number

01 Name

Town of Erwin

02 D&B Number

03 Street Address (P.O. Box, RFD #, etc.)
100 Chemung Street

04 SIC Code

03 Street Address (P.O. Box, RFD #, etc.)
117 West Water Street

04 SIC Code

05 City

Painted Post

06 State

NY

07 Zip Code

14870

05 City

Painted Post

06 State

NY

07 Zip Code

14870

IV. TRANSPORTER(S)

01 Name

02 D&B Number

01 Name

02 D&B Number

03 Street Address (P.O. Box, RFD #, etc.)

04 SIC Code

03 Street Address (P.O. Box, RFD #, etc.)

04 SIC Code

05 City

06 State

07 Zip Code

05 City

06 State

07 Zip Code

01 Name

02 D&B Number

01 Name

02 D&B Number

03 Street Address (P.O. Box, RFD #, etc.)

04 SIC Code

03 Street Address (P.O. Box, RFD #, etc.)

04 SIC Code

05 City

06 State

07 Zip Code

05 City

06 State

07 Zip Code

V. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)

New York State Department of Environmental Conservation - Region 8

United States Environmental Protection Agency Region II files - NUS Corporation Report 02-8710-113-PA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 10 - PAST RESPONSE ACTIVITIES		I. IDENTIFICATION	
		01 State NY	02 Site Number 851003
II. PAST RESPONSE ACTIVITIES			
01 ☐ A. Water Supply Closed 04 Description:	02 Date _____	03 Agency _____	
01 ☐ B. Temporary Water Supply Provided 04 Description:	02 Date _____	03 Agency _____	
01 ☐ C. Permanent Water Supply Provided 04 Description:	02 Date _____	03 Agency _____	
01 ☐ D. Spilled Material Removed 04 Description:	02 Date _____	03 Agency _____	
01 ☐ E. Contaminated Soil Removed 04 Description:	02 Date _____	03 Agency _____	
01 ☐ F. Waste Repackaged 04 Description:	02 Date _____	03 Agency _____	
01 ☐ G. Waste Disposed Elsewhere 04 Description:	02 Date _____	03 Agency _____	
01 ☐ H. On-Site Burial 04 Description:	02 Date _____	03 Agency _____	
01 ☐ I. <u>In Situ</u> Chemical Treatment 04 Description:	02 Date _____	03 Agency _____	
01 ☐ J. <u>In Situ</u> Biological Treatment 04 Description:	02 Date _____	03 Agency _____	
01 ☐ K. <u>In Situ</u> Physical Treatment 04 Description:	02 Date _____	03 Agency _____	
01 ☐ L. Encapsulation 04 Description:	02 Date _____	03 Agency _____	
01 ☐ M. Emergency Waste Treatment 04 Description:	02 Date _____	03 Agency _____	
01 ☐ N. Cutoff Walls 04 Description:	02 Date _____	03 Agency _____	
01 ☐ O. Emergency Diking/Surface Water Diversion 04 Description:	02 Date _____	03 Agency _____	
01 ☐ P. Cutoff Trenches/Sump 04 Description:	02 Date _____	03 Agency _____	

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 State

NY

02 Site Number

851003

II. PAST RESPONSE ACTIVITIES (Cont.)

01 ☐ Q. Subsurface Cutoff Wall

02 Date _____

03 Agency _____

04 Description:

01 ☐ R. Barrier Walls Constructed

02 Date _____

03 Agency _____

04 Description:

01 ☒ S. Capping/Covering

02 Date 1983

03 Agency _____

04 Description:

Approximately 2 feet of final cover was added to the facility in 1983.

01 ☐ T. Bulk Tankage Repaired

02 Date _____

03 Agency _____

04 Description:

01 ☐ U. Grout Curtain Constructed

02 Date _____

03 Agency _____

04 Description:

01 ☐ V. Bottom Sealed

02 Date _____

03 Agency _____

04 Description:

01 ☐ W. Gas Control

02 Date _____

03 Agency _____

04 Description:

01 ☐ X. Fire Control

02 Date _____

03 Agency _____

04 Description:

01 ☐ Y. Leachate Treatment

02 Date _____

03 Agency _____

04 Description:

01 ☐ Z. Area Evacuated

02 Date _____

03 Agency _____

04 Description:

01 ☐ 1. Access to Site Restricted

02 Date _____

03 Agency _____

04 Description:

01 ☐ 2. Population Relocated

02 Date _____

03 Agency _____

04 Description:

01 ☐ 3. Other Remedial Activities

02 Date _____

03 Agency _____

04 Description:

III. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)

New York State Department of Environmental Conservation, Region 8
Town of Erwin, New York

APPENDIX B

GEOPHYSICAL SURVEY REPORT

B-1

1940

1941

1942

1943



LU ENGINEERS

Civil and Environmental

September 16, 1993

Ms. Valerie Woodward, Senior Engineering Geologist
Western Investigation Section
Bureau of Hazardous Site Control
Division of Hazardous Waste Remediation
NYS Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

RE: Erwin Town Landfill (Site #851003)
Geophysical Survey Results

Dear Ms. Woodward:

Enclosed are the results of the geophysical survey which was performed on August 19, 23 and 25, 1993 by Joseph C. Lu, P.E., P.C. (JCL) at the Erwin Town Landfill site, located in the Town of Erwin, Steuben County, New York. Included here is a discussion of the survey techniques used and the results of the survey. A Grid Location Map and contour plots of the data collected from each grid are included as Attachments 1 and 2, respectively.

Geophysical surveys were performed at each of the six proposed groundwater monitoring well locations at the Erwin Landfill site. One grid was surveyed for each proposed location.

Upon arrival, JCL personnel conducted a preliminary site walkover to determine proposed well locations. JCL personnel screened each proposed well location with a Foxboro OVA. No detectable readings above background were found at any of the six proposed wells, or elsewhere on the site.

The site drawing provided by Ecology and Environment (E&E) was not drawn to scale, but included all pertinent features on the site. As a result, there may be some minor variation between intended well placement and the locations of the grids. The process of grid location was limited by the presence of overhead power lines and a buried telephone conduit in the northeastern area of the site. Grid location on the south and southeast sides of the landfill was also limited by the presence of trees, the Conrail railroad grade, overhead utilities, and a flood levee on the southwest end of the landfill.

SURVEY TECHNIQUES

A total of six geophysical grids were set up on the site at locations roughly corresponding to those outlined by E&E on the site map. The grids were numbered with reference to the intended well placement at each location.

Ms. Valerie Woodward
September 16, 1993
Page 2

Each grid was set up as a 40' x 40' grid aligned to a north axis with the exception of Grids 3 and 6. Grid 3 was set up 30' x 40' with the short axis aligned to a North 30° East orientation due to the proximity of nearby power lines and the base of the landfill. Grid 6 was set 40' x 30' with the long axis aligned to a North 70° East orientation due to the close proximity of wooded areas, a flood levee, and the Conrail railroad grade.

The geophysical surveys were performed using an EG&G Geometrics model G-856 proton precession magnetometer, and a Geonics, Ltd., model EM31 ground conductivity meter.

One reading of the earth's total magnetic field (in units of gammas) was collected at each grid station. Magnetic readings were later corrected for diurnal drift from base station readings. Four readings were recorded at each grid station by the EM31. Two of these readings were collected with the instrument oriented parallel to the Y-axis of the grid (orientation 1), and the remaining two were collected with the instrument oriented parallel to the X-axis (orientation 2). The readings in each orientation consisted of the quadrature phase component (conductivity) of the induced magnetic field in both the vertical (V) and horizontal (H) dipole modes.

The quadrature phase component measures ground conductivity in units of millimhos/meter (mmhos/m). In the vertical dipole mode, the instrument response has a maximum depth of penetration of approximately 18 feet below ground surface and it is more sensitive to deeply buried objects. In the horizontal dipole mode, the instrument response has a maximum depth of penetration of about 9 feet below ground surface and is more sensitive to shallow objects.

All instrument readings were electronically recorded and stored by the instruments. Magnetometer readings were down-loaded using MAGPAC Version 4.1.5-89 software (EG&G Geometrics), and EM31 readings were down-loaded using DAT31 Version 3.20 software (Geonics, Ltd.). All geophysical data were then plotted and contoured using Surfer Version 4.0 software, (Golden Software, Inc.).

A total of 31 contour drawings were produced. Five drawings were made from each grid including one magnetometer contour drawing and four conductivity drawings (one for each instrument orientation). Two magnetics drawings were generated for Grid 2 at different contour intervals in order to allow easier interpretation due to an unusually large magnetic anomaly in this location. These drawings have been included in the attachments.

GRID DESCRIPTION AND INTERPRETATIONS

Grid #1

Orientation: North
Grid Size: 40' x 40' (with 10' spacing)
Proposed Well Location: X=20, Y=20
Objects Present: N/A

The majority of the grid showed the presence of moderate conductivity anomalies. Significant magnetic anomalies were present at the X=10, Y=20 to 30 and X=30, Y=0. No evidence was available to suggest explanations for the presence of these anomalies. The only area of the grid which appeared to be relatively free of anomalies was located between X=0 to 10, Y=30 to 40.

Based on the geophysical data collected for Grid #1, the proposed location for MW1 should be moved to the area of X=0 to 10, Y=30 to 40.

Grid #2

Orientation: North
Grid Size: 40' x 40' (with 10' spacing)
Proposed Well Location: X=20, Y=20
Objects Present: Overhead lines 25' north of grid running roughly east/west, edge of landfill at Y=0 to 10.

An extreme magnetic anomaly was found at, and in the vicinity of X=20, Y=30. Strong east/west oriented lineations were found to be present in the conductivity grids which may be the result of interference from the nearby overhead lines. The areas between X=0 to 10 and 30 to 40, Y=35 to 40 appear to be free of significant magnetic or conductivity anomalies. The areas between Y=0 to 20 are interpreted here as the toe of the landfill due to significant change in appearance of the Magnetic and V1 and V2 conductivity contours to the south of Y=10.

Based on the findings of the geophysical work at Grid 2, the proposed well location should be moved to either X=0 to 10, Y=35 to 40, or X=30 to 40, Y=35 to 40. The area between Y=0 and 10 is occupied by the landfill which is clearly evident in both the magnetometer and conductivity contour drawings.

Ms. Valerie Woodward
September 16, 1993
Page 4

Grid #3

Orientation:	N30E
Grid Size:	30' x 40' (short axis is Y, with 10' spacing)
Proposed Well Location:	X=20, Y=10
Objects Present:	Overhead lines 20' to north of Y=30 running roughly east/west, edge of landfill, immediately to south of Y=0

Relatively low-level magnetic and conductivity anomalies are present throughout the majority of the grid and in the proposed well location. A consistent linear trend is apparent in all the contour drawings which runs roughly from X=0, Y=0 to X=40, Y=30 diagonally across each grid. The area around data point X=30, Y=10 appears to be free of anomalous magnetic and conductivity readings. The cause of this diagonal trend in the grids is not known but may be a result of the nearby overhead lines, or the toe of the landfill.

Based on the findings of the geophysical work at Grid 3, the proposed well location should be moved to the area of X=30, Y=10.

Grid #4

Orientation:	North
Grid Size:	40' x 40' (with 10' spacing)
Proposed Well Location:	X=20, Y=20
Objects Present:	Chain-link fence approx. 50' to the east of X=40 running roughly NE/SW. Edge of landfill approx. 50' to the west of X=0

Strong magnetic anomalies are present along X=2- to 30, Y=30 and X=0, Y=0 to 30. The origin of these magnetic anomalies is unclear. Relatively weak north/south conductivity lineation and magnetic anomalies appear to occupy the majority of the grid, including the proposed well location. X=10, Y=20 appears to be the only area where anomalous readings were not found. The toe of the landfill does not appear to be present within any of these grids.

Based on the findings of the geophysical work at Grid 4, the proposed well location should be relocated to the area around X=10, Y=20.

Grid #5

Orientation:	North
Grid Size:	40' x 40' (with 10' spacing)
Proposed Well Location:	X=20, Y=10
Objects Present:	Overhead lines 20' of east and south borders of grid (running roughly parallel to sides of grid)

The majority of the gridded area is marked by a significant magnetic anomaly, and moderate conductivity anomalies and linearities which run predominantly east/west. It is possible that these lineations represent interference from nearby overhead utilities. The conductivities show a general increase toward the north. However, the area between X=30 to 40, Y=20 to 30 appears to be free of significantly anomalous readings.

Based on the findings of the geophysical work performed at Grid #5, the proposed well location should be moved to the area between X=30 to 40, and Y=20 to 30.

Grid #6

Orientation:	N70E
Grid Size:	40' x 30' (long axis is Y, with 10' spacing)
Proposed Well Location:	X=10, Y=20
Objects Present:	Conrail railroad grade to immediate "east" of grid, parallel to Y axis, overhead line immediately to "west" of grid, parallel to Y axis, flood levee to immediate "south" of grid, parallel to X axis

Magnetometer readings show several anomalies in the grid while conductivity readings are indicative of only one small area of concern in the northeast quadrant of the grid. Magnetic lineation to the west is also apparent, possibly due to the railroad tracks or overhead utilities. This location would also be clear of overhead drilling hazards and topographic problems associated with access for the rig.

Based on the findings of the geophysical work performed at Grid 6, it appears that the proposed location for MW6 should be moved to the area around X=20, Y=10 to avoid the previously mentioned anomalies.

Ms. Valerie Woodward
September 16, 1993
Page 6

CONCLUSIONS/RECOMMENDATIONS

Analysis of EM31 and Magnetometer data for each of the survey grids has shown both areas which should be avoided, and areas which appear to be clear of subsurface drilling hazards. The locations of the proposed wells will need to be moved for each grid as described above, to ensure that anomalous areas are avoided.

If you have any questions or require additional information, please contact myself, Jim MacKecknie or Marcia Liao at (716) 377-1450.

Sincerely,

Greg Andrus
Geologist

cc: Rick Watt, Ecology & Environment
File 10606-04

Enc.-2

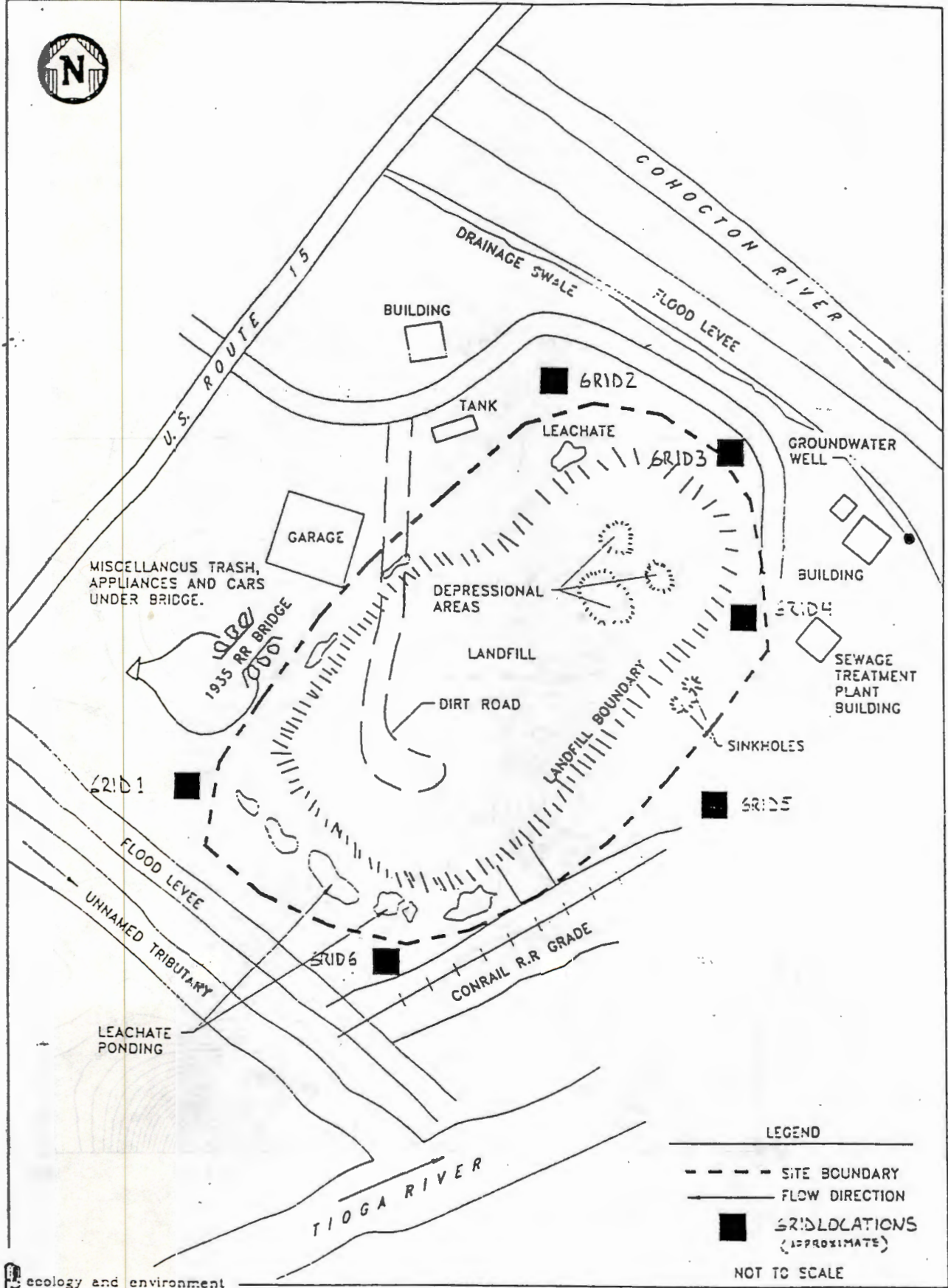
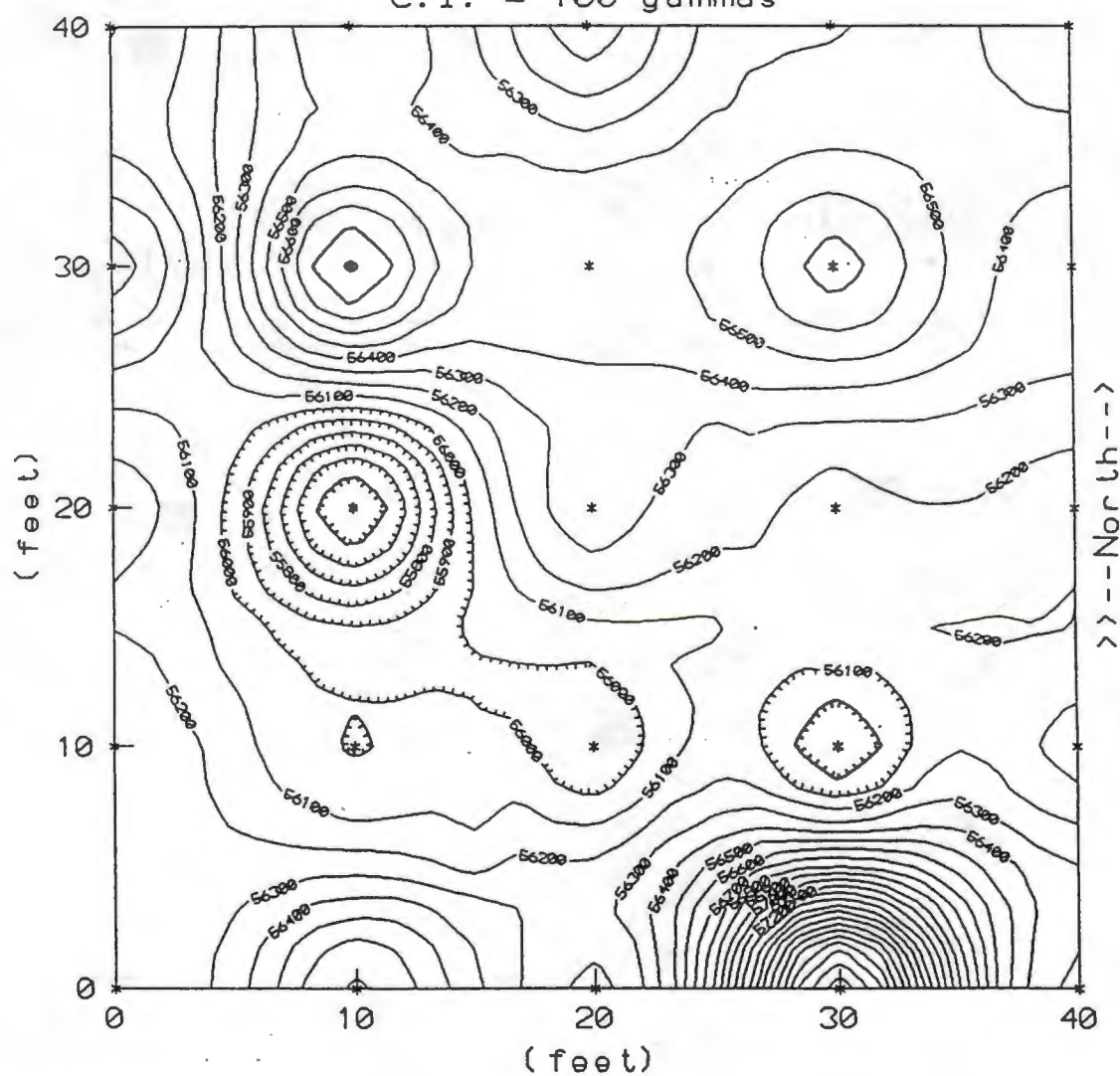


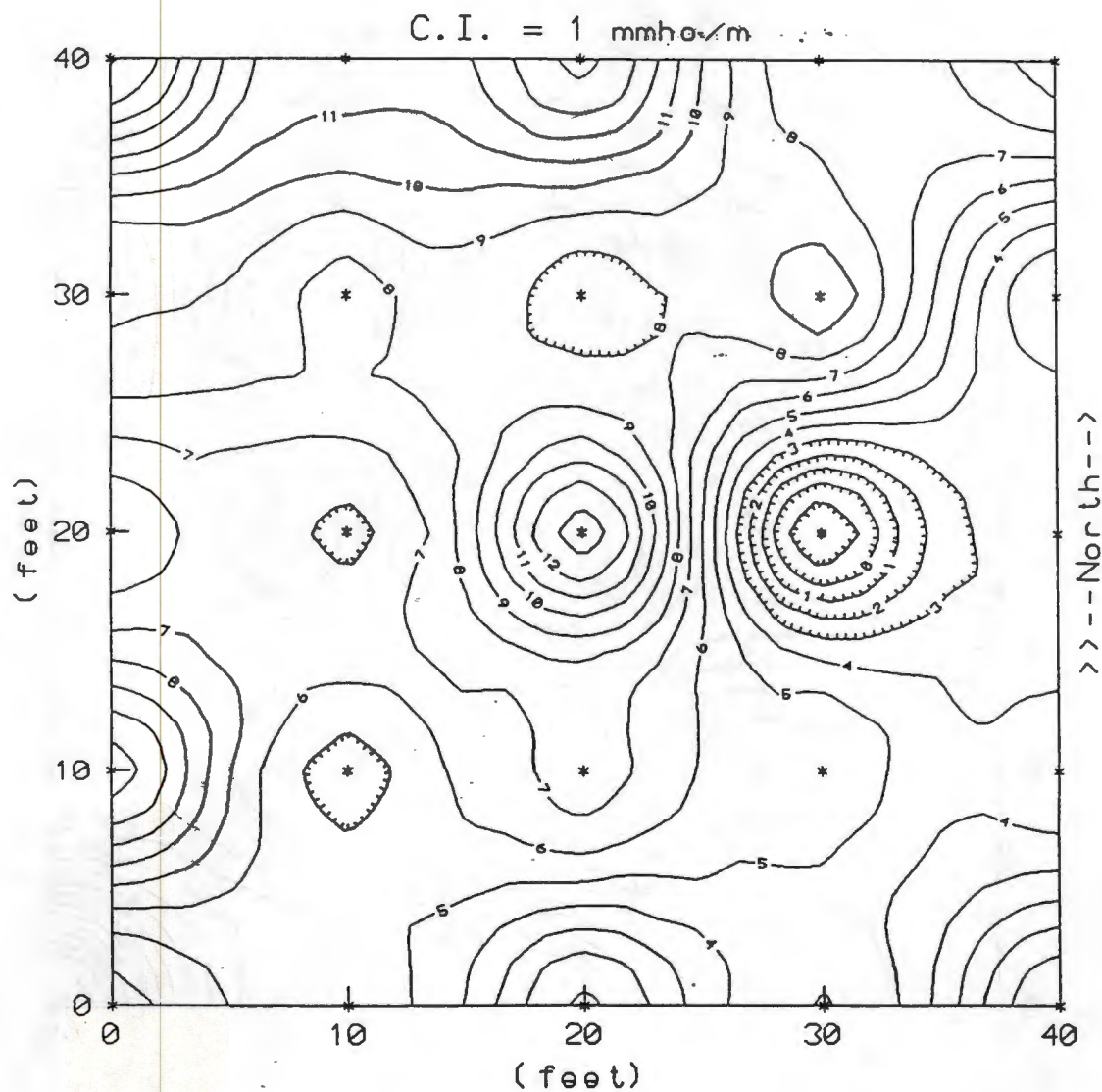
Figure 1-2 SITE MAP, ERWIN TOWN LANDFILL

Erwin Magnetics Grid 1

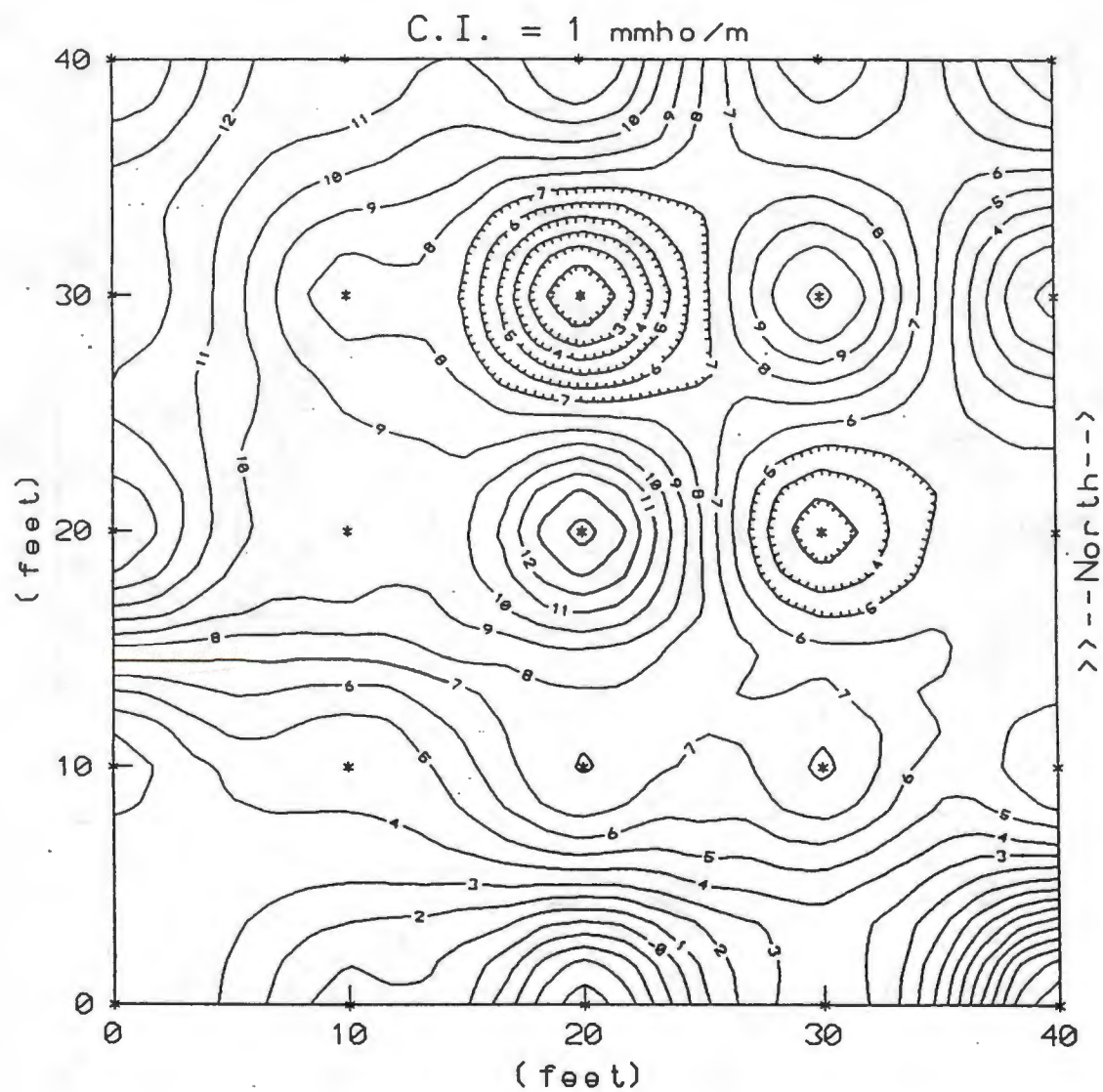
C.I. = 100 gammas



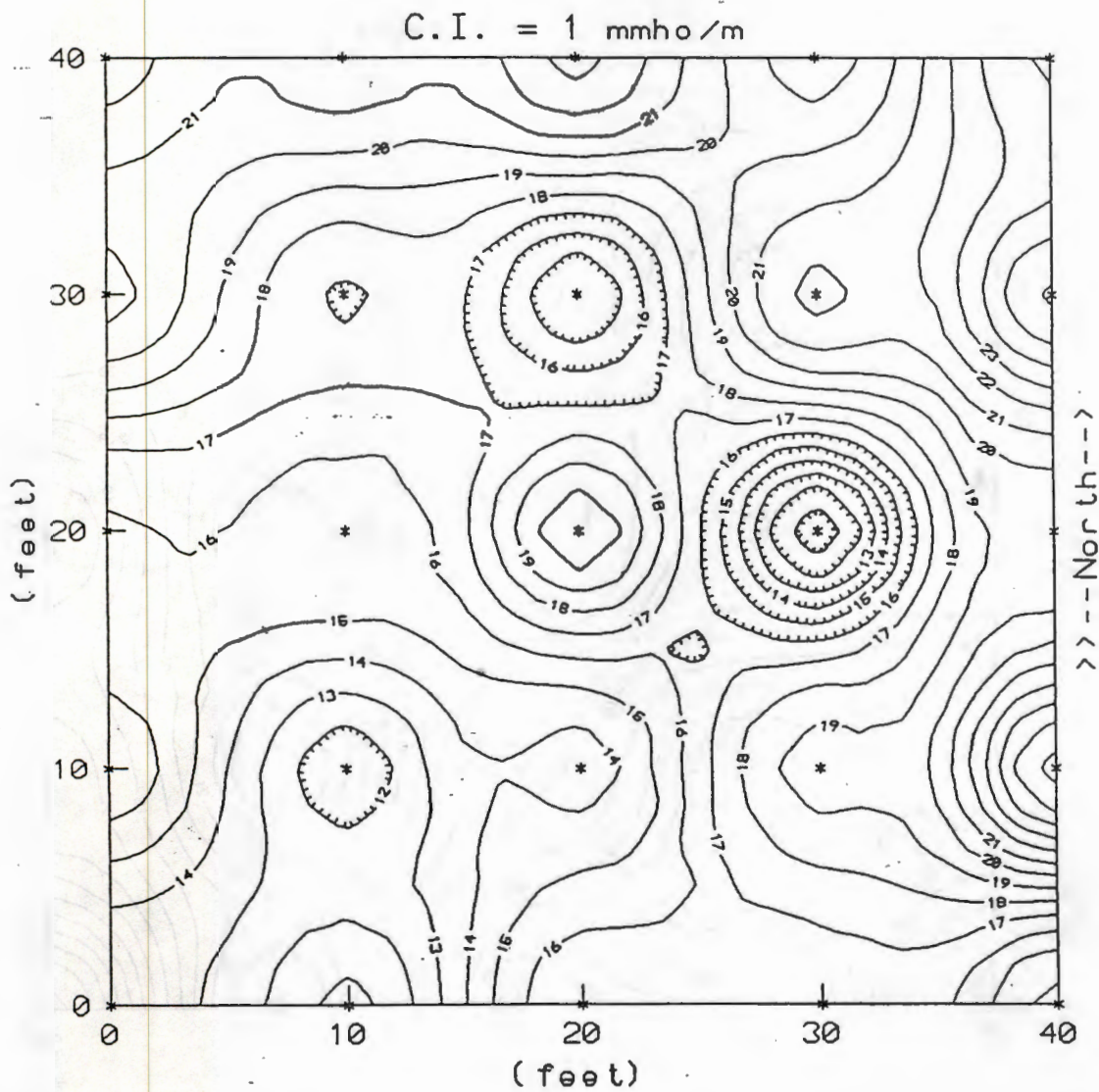
Erwin V1 Conductivity Grid 1



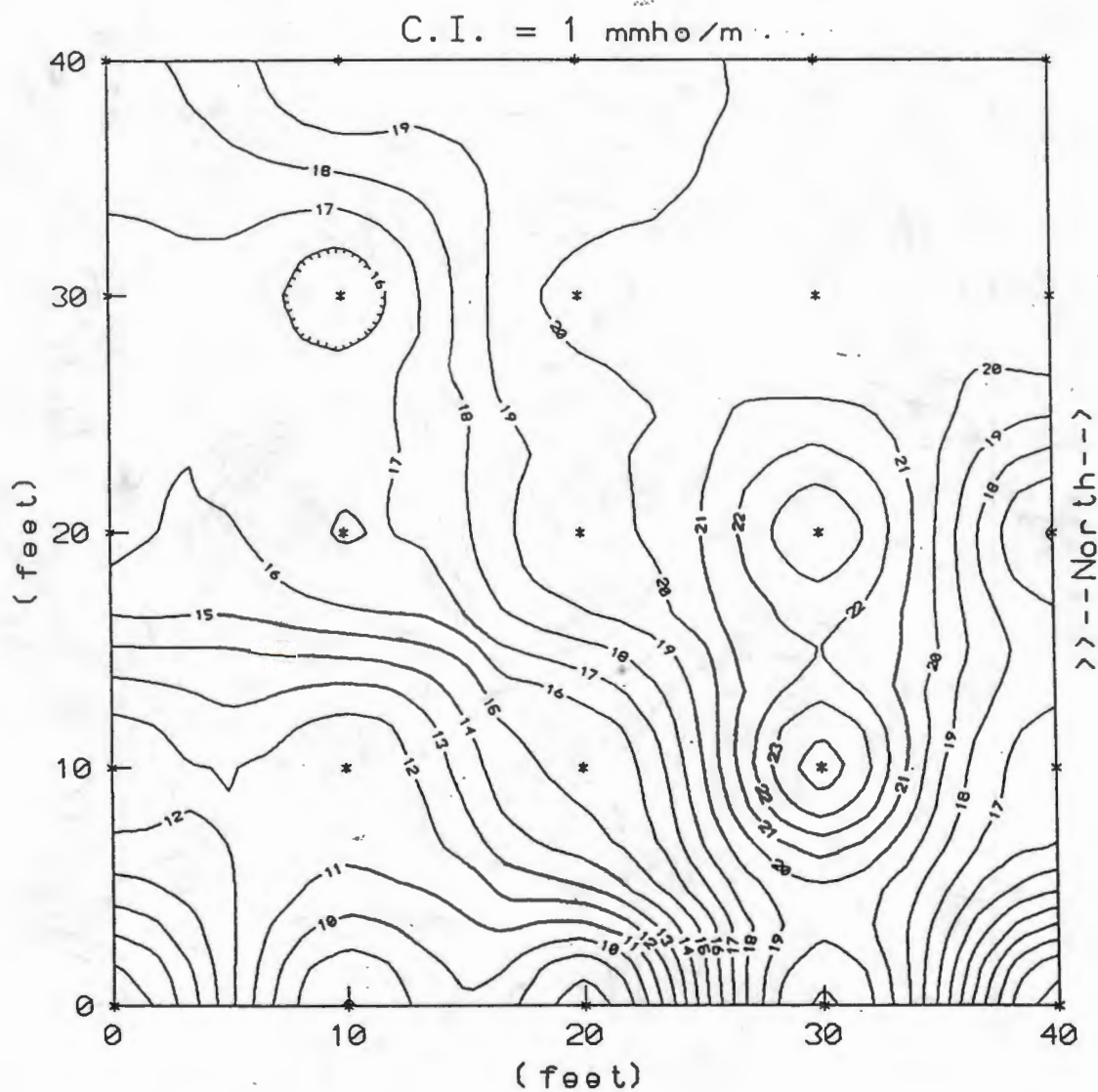
Erwin V2 Conductivity Grid 1



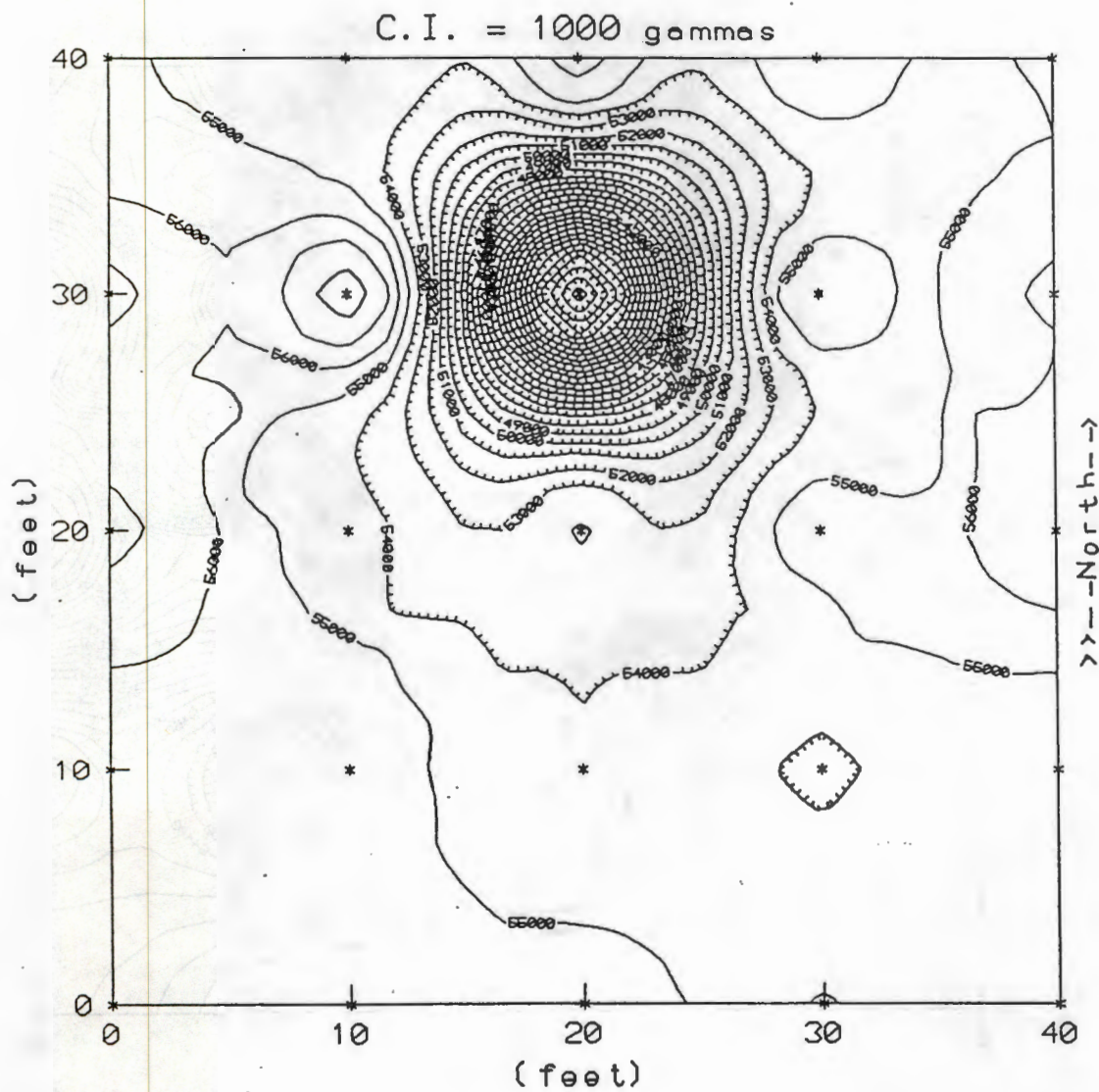
Erwin H1 Conductivity Grid 1



Erwin H2 Conductivity Grid 1

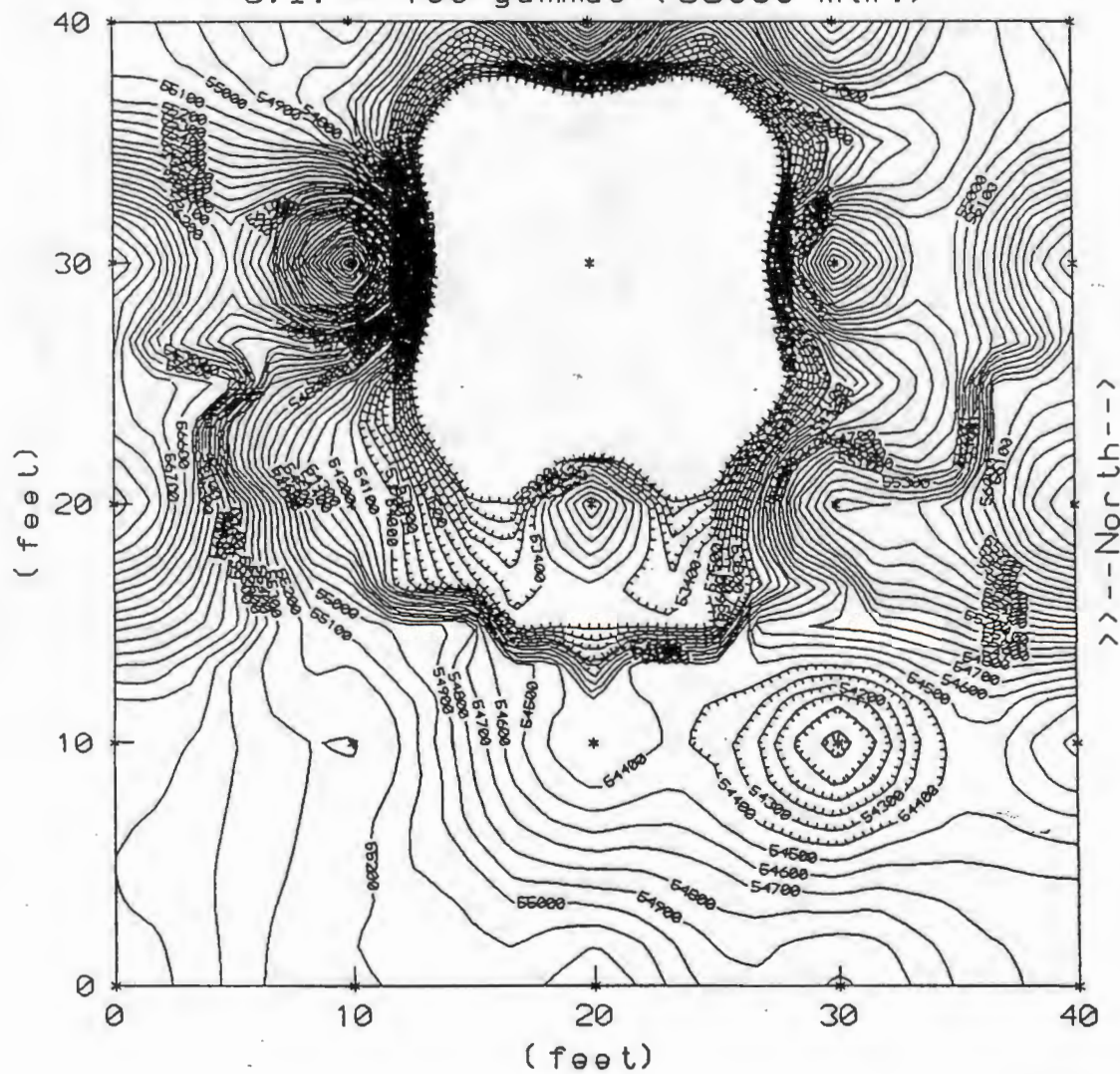


Erwin Magnetics Grid 2

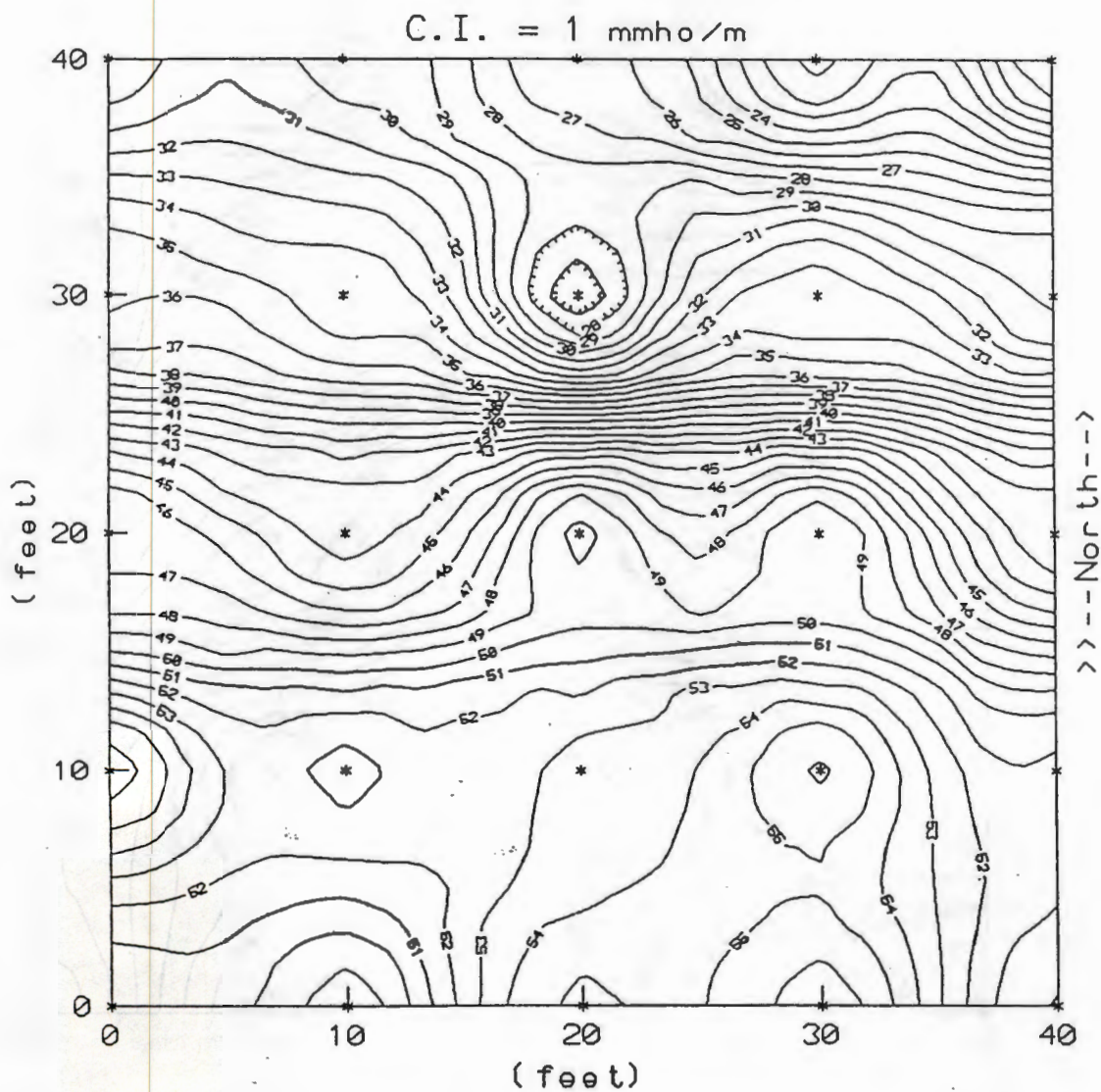


Erwin Magnetics Grid 2

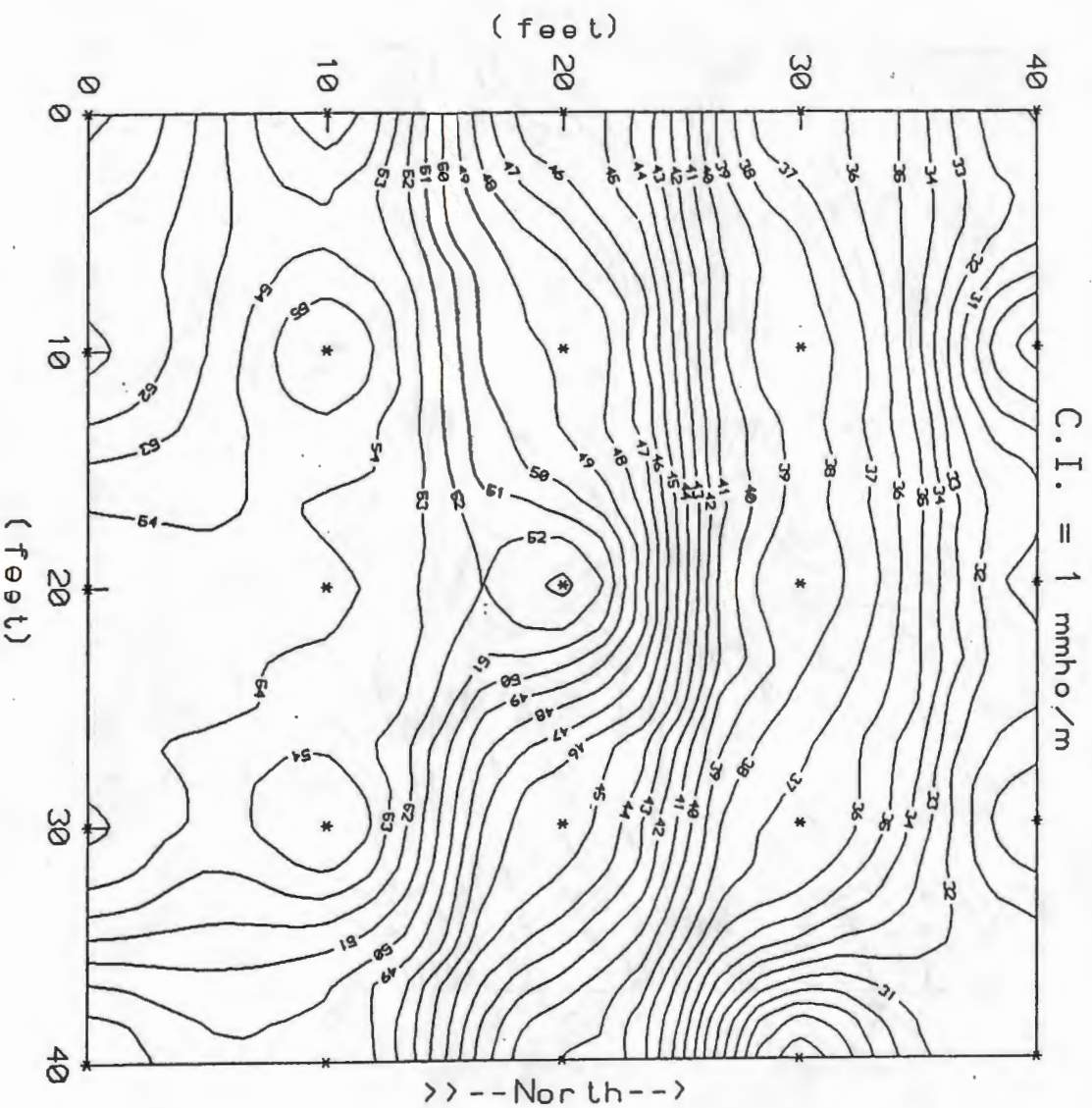
C.I. = 100 gammas (53000 min.)



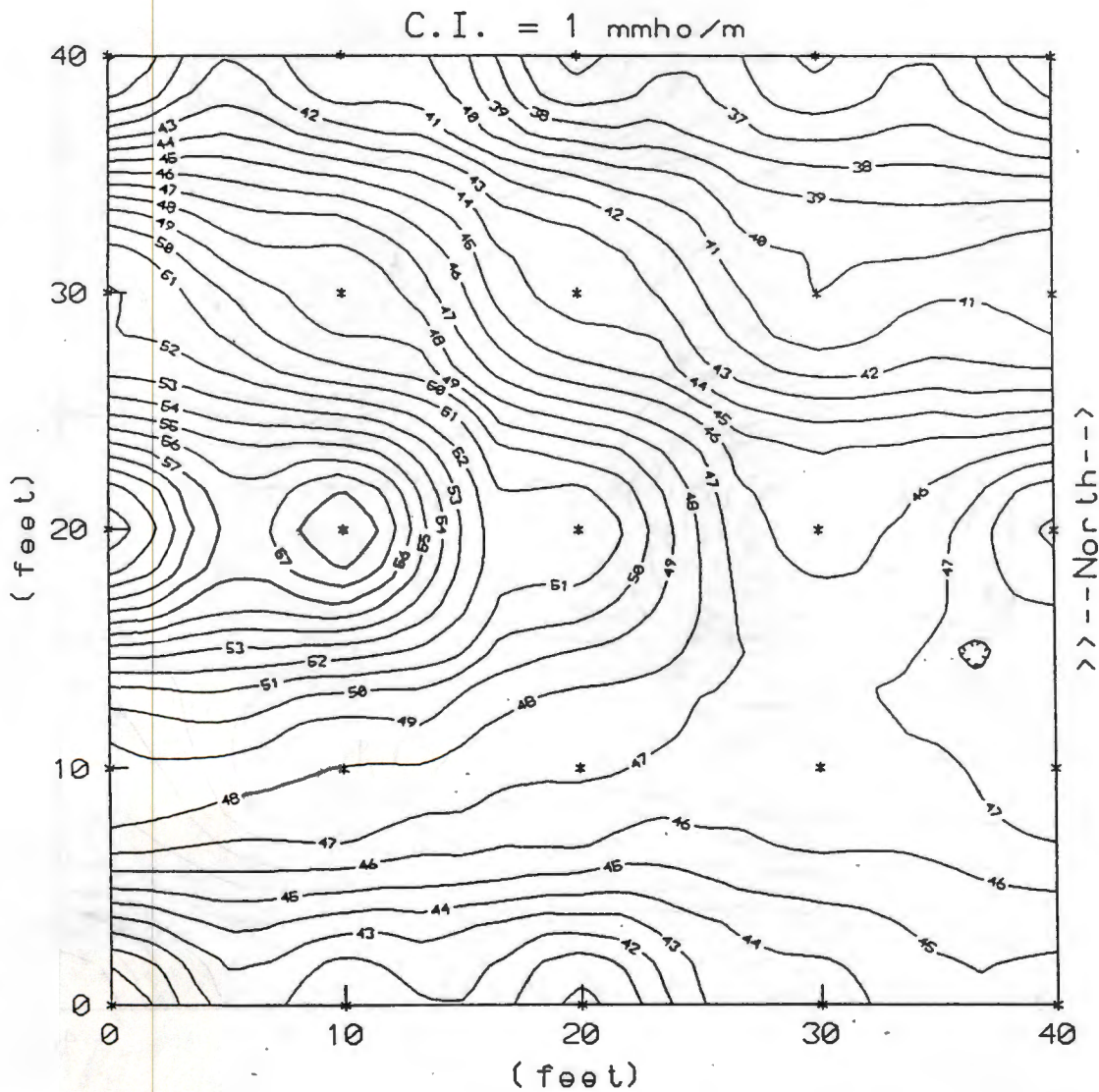
Erwin V1 Conductivity Grid 2



Erwin V2 Conductivity Grid 2

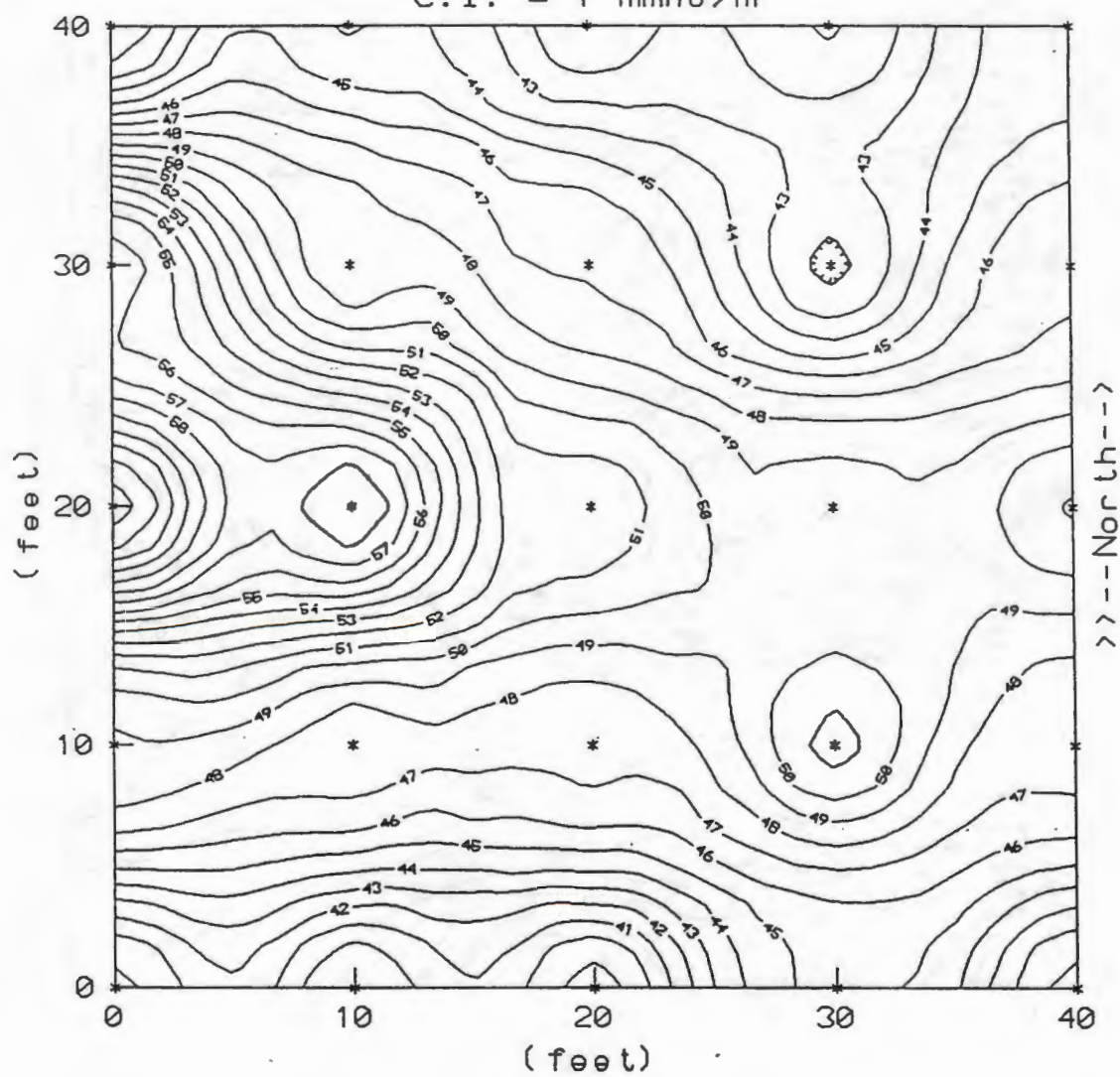


Erwin H1 Conductivity Grid 2

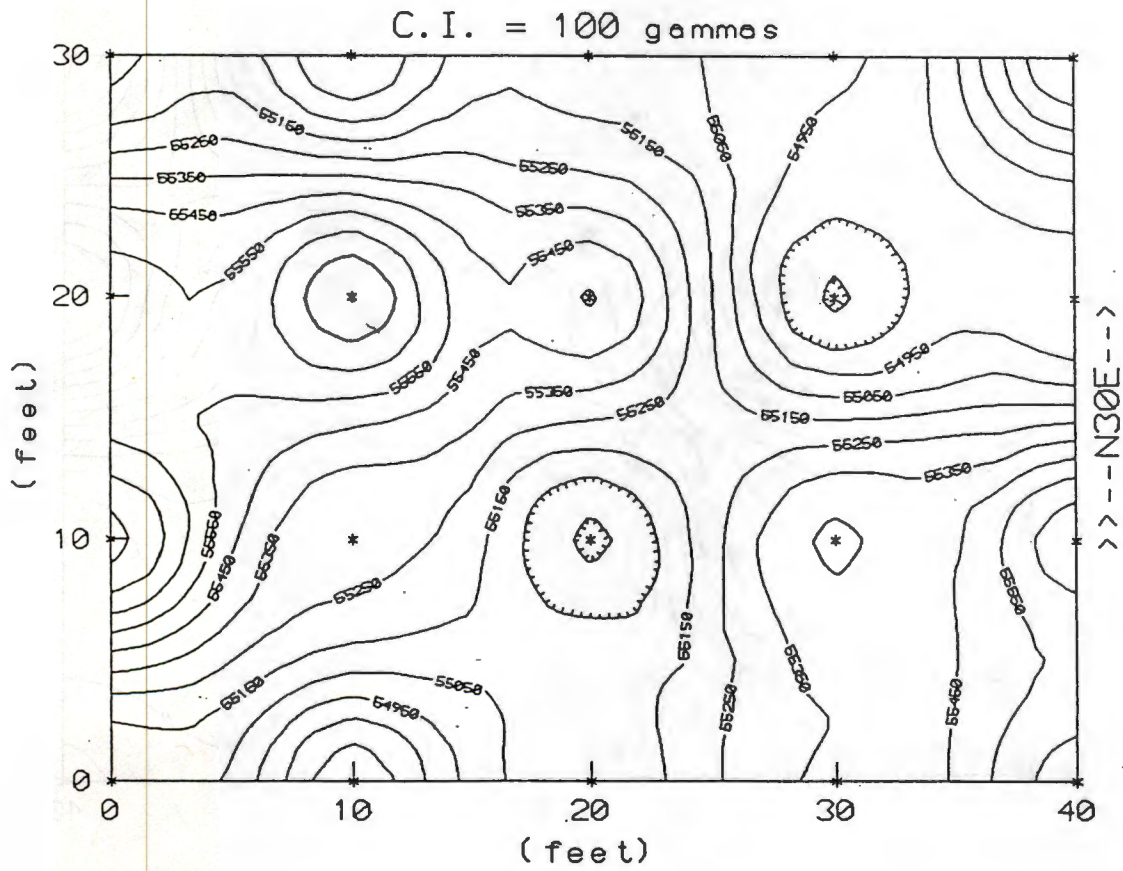


Erwin H2 Conductivity Grid 2

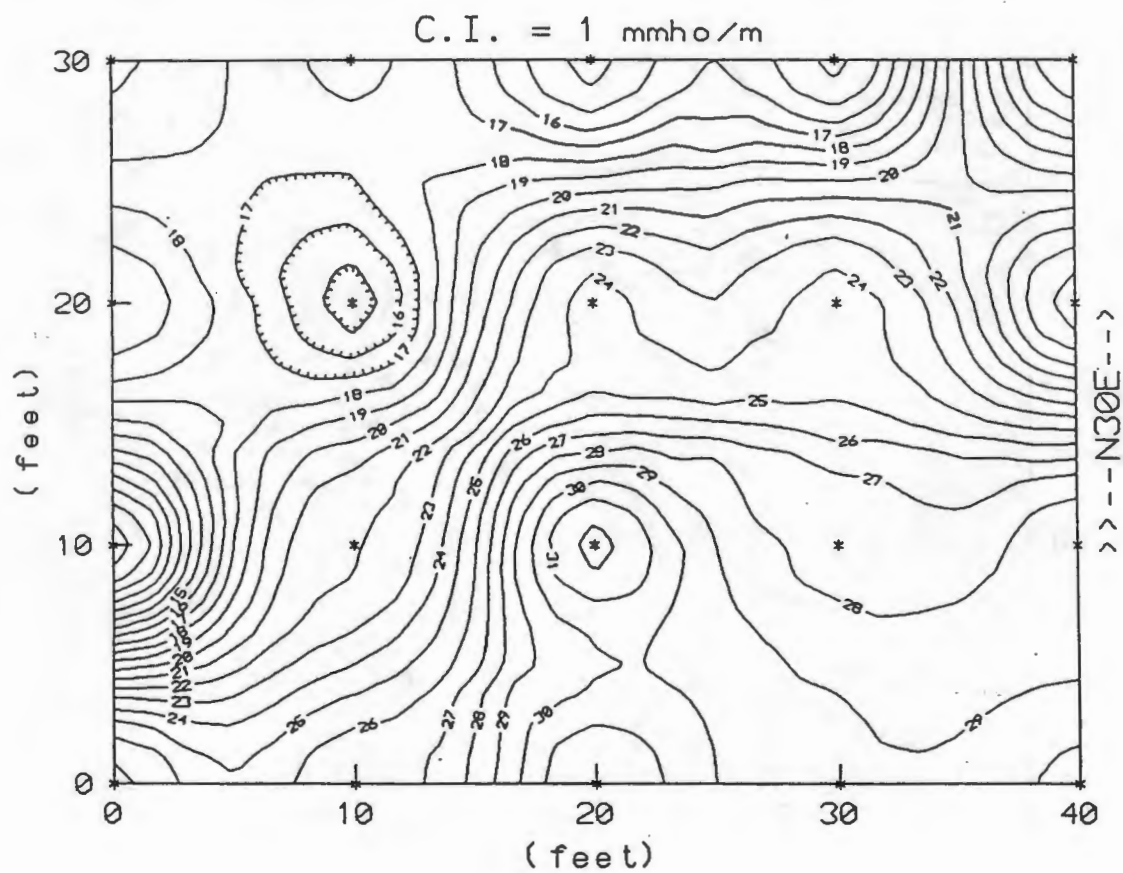
C.I. = 1 mmho/m



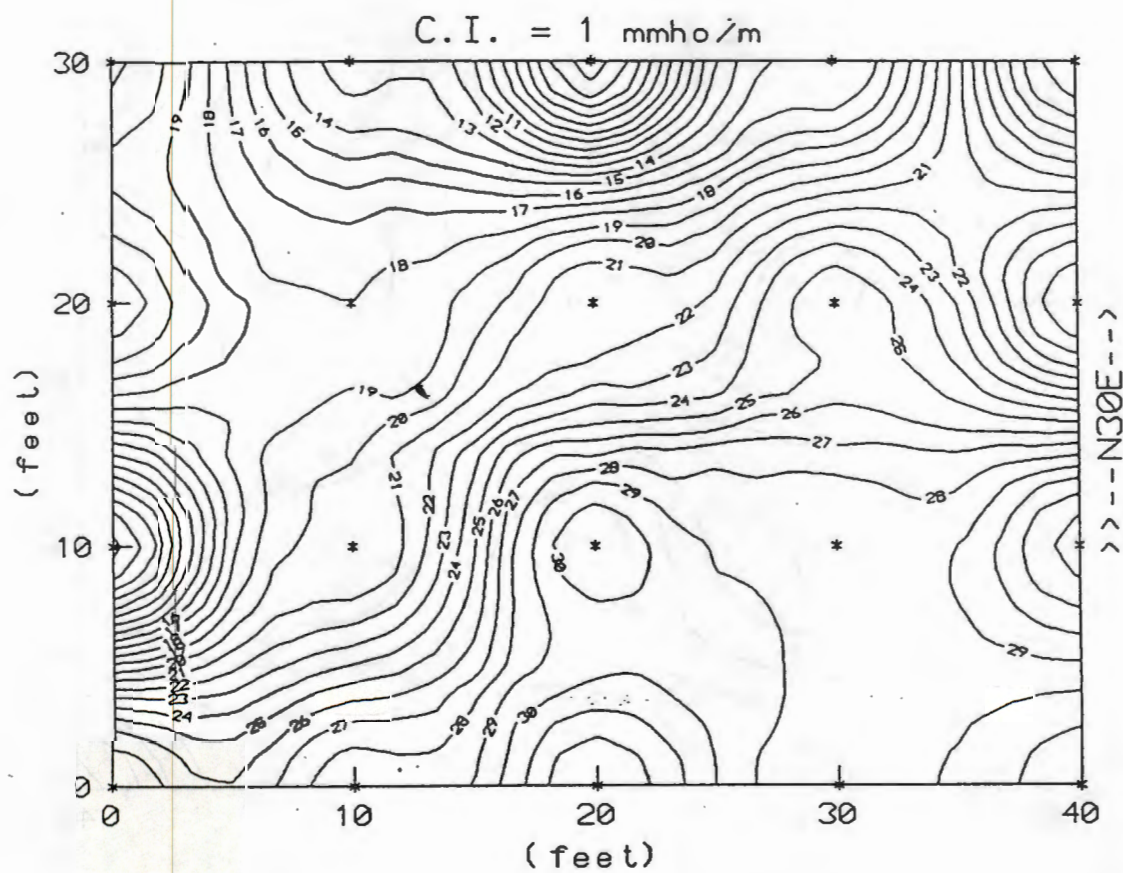
Erwin Magnetics Grid 3



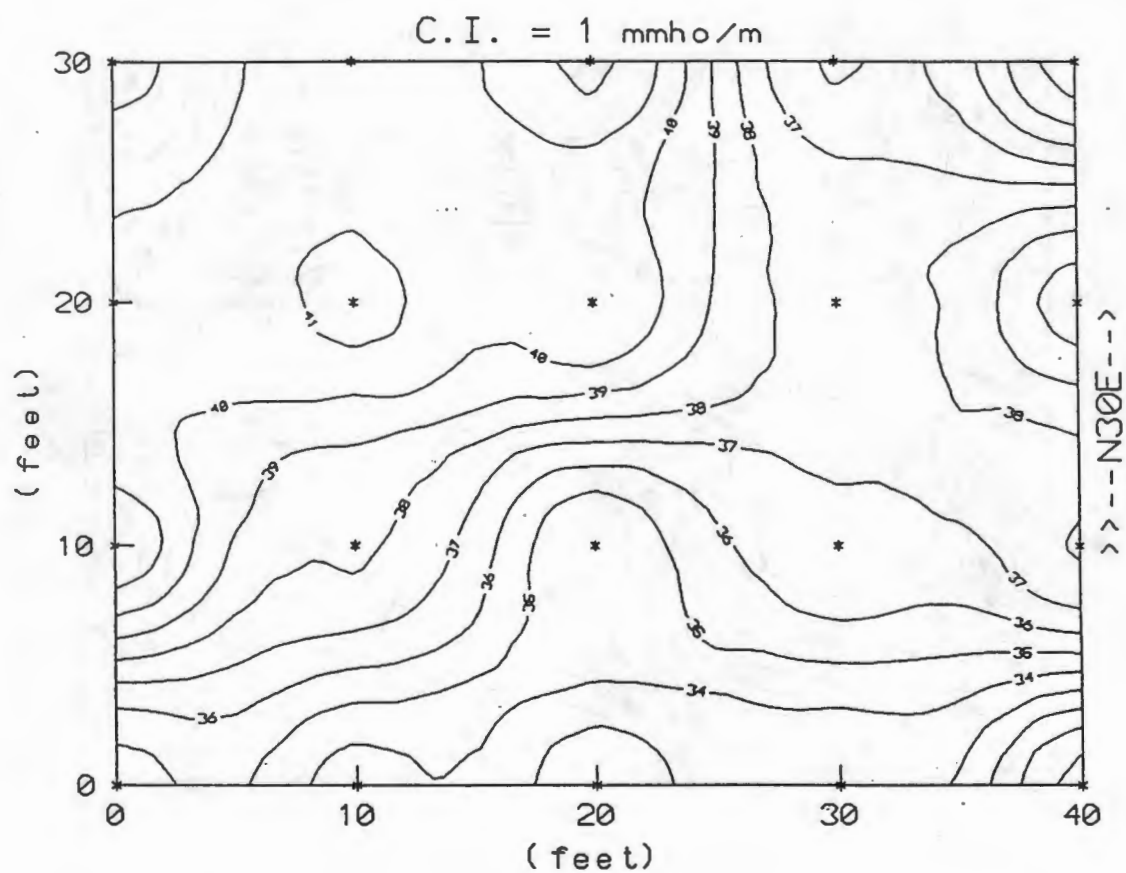
Erwin V1 Conductivity Grid 3



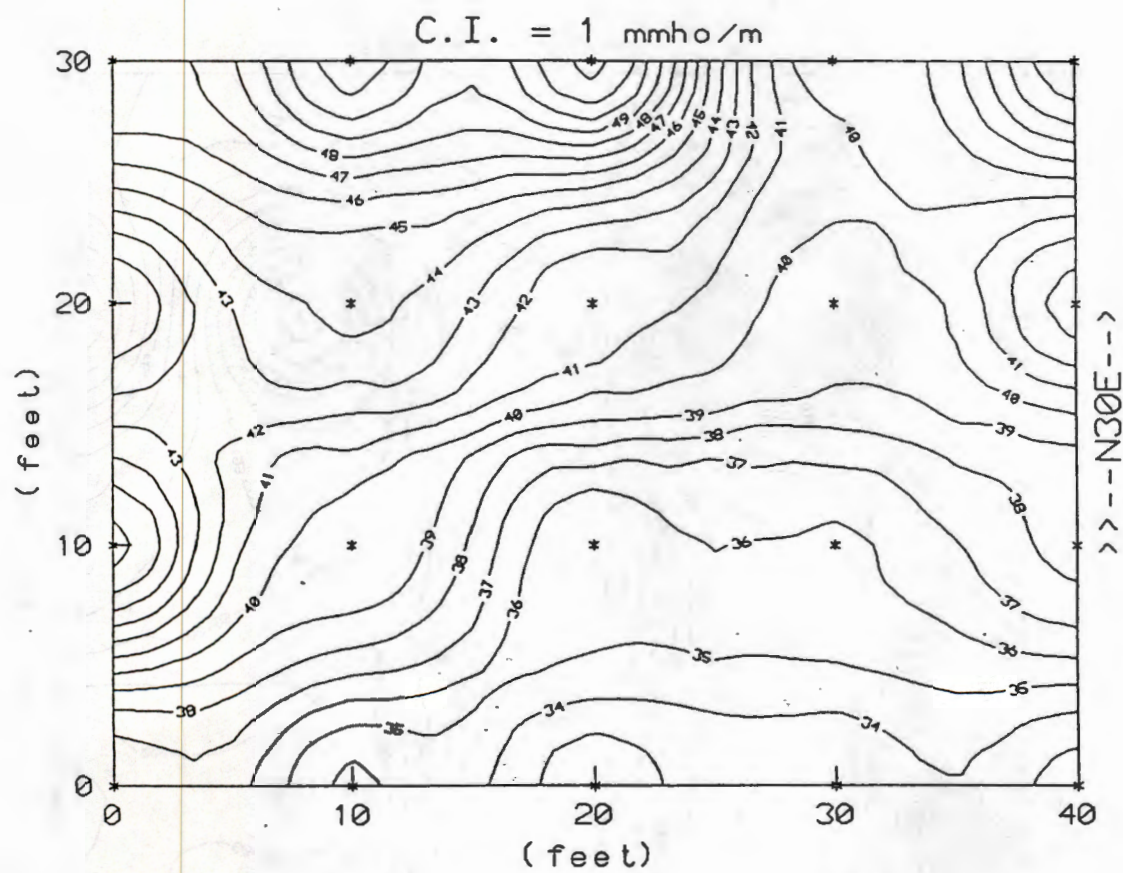
Erwin V2 Conductivity Grid 3

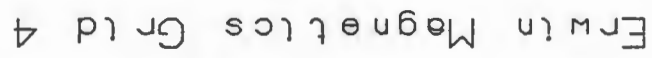


Erwin H1 Conductivity Grid 3



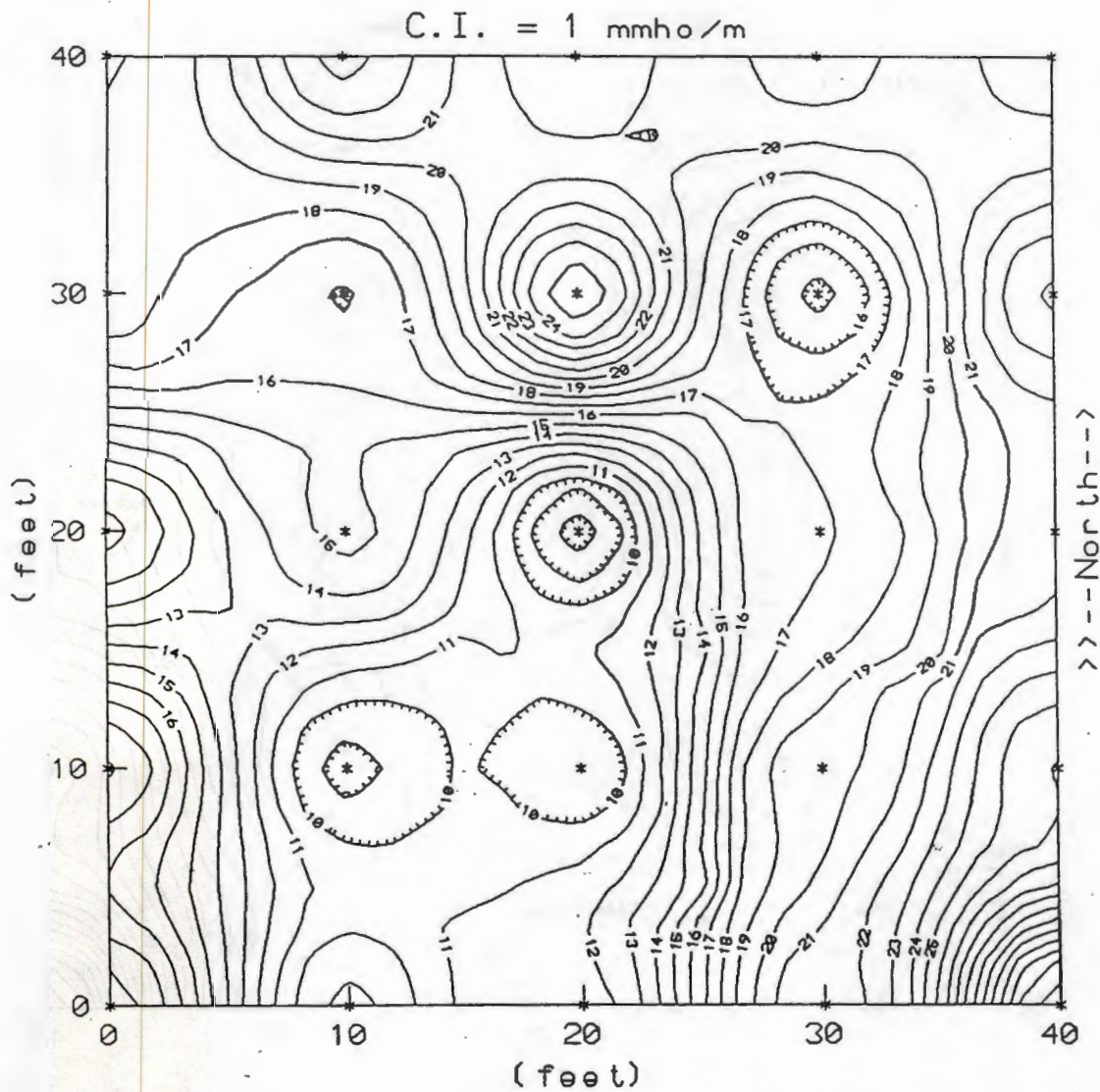
Erwin H2 Conductivity Grid 3



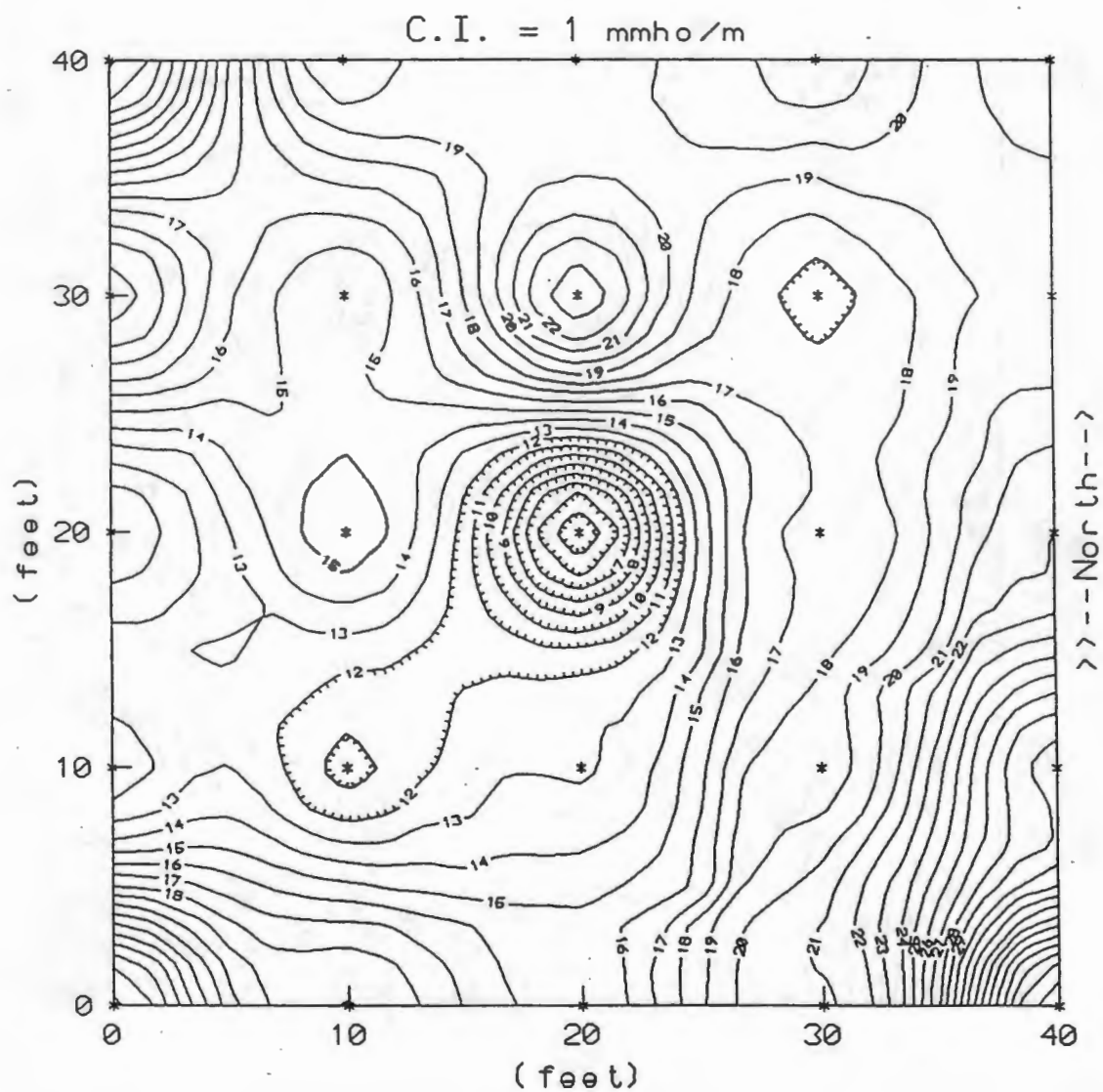


C.I. = 100 g ommes

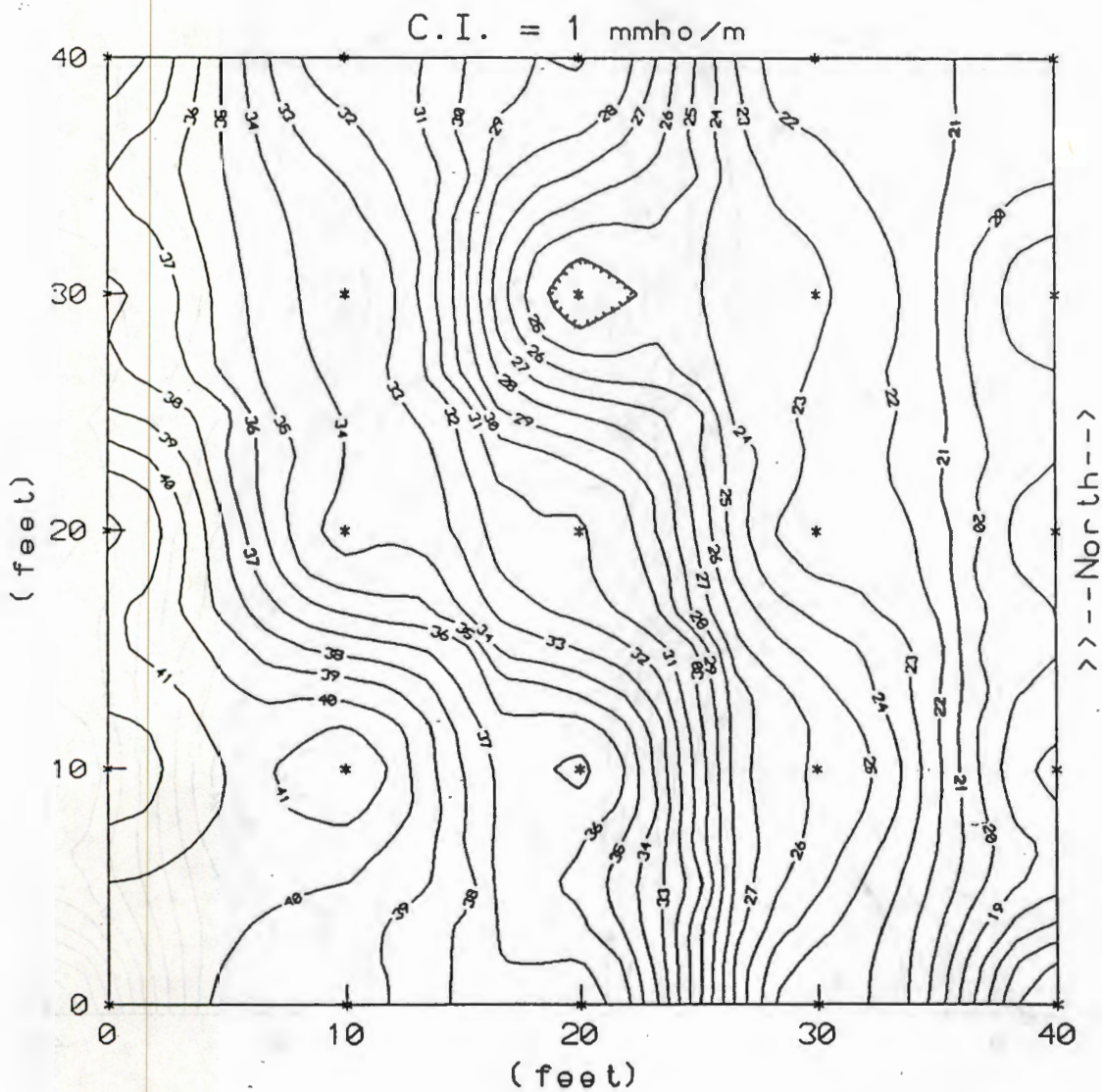
Erwin V1 Conductivity Grid 4



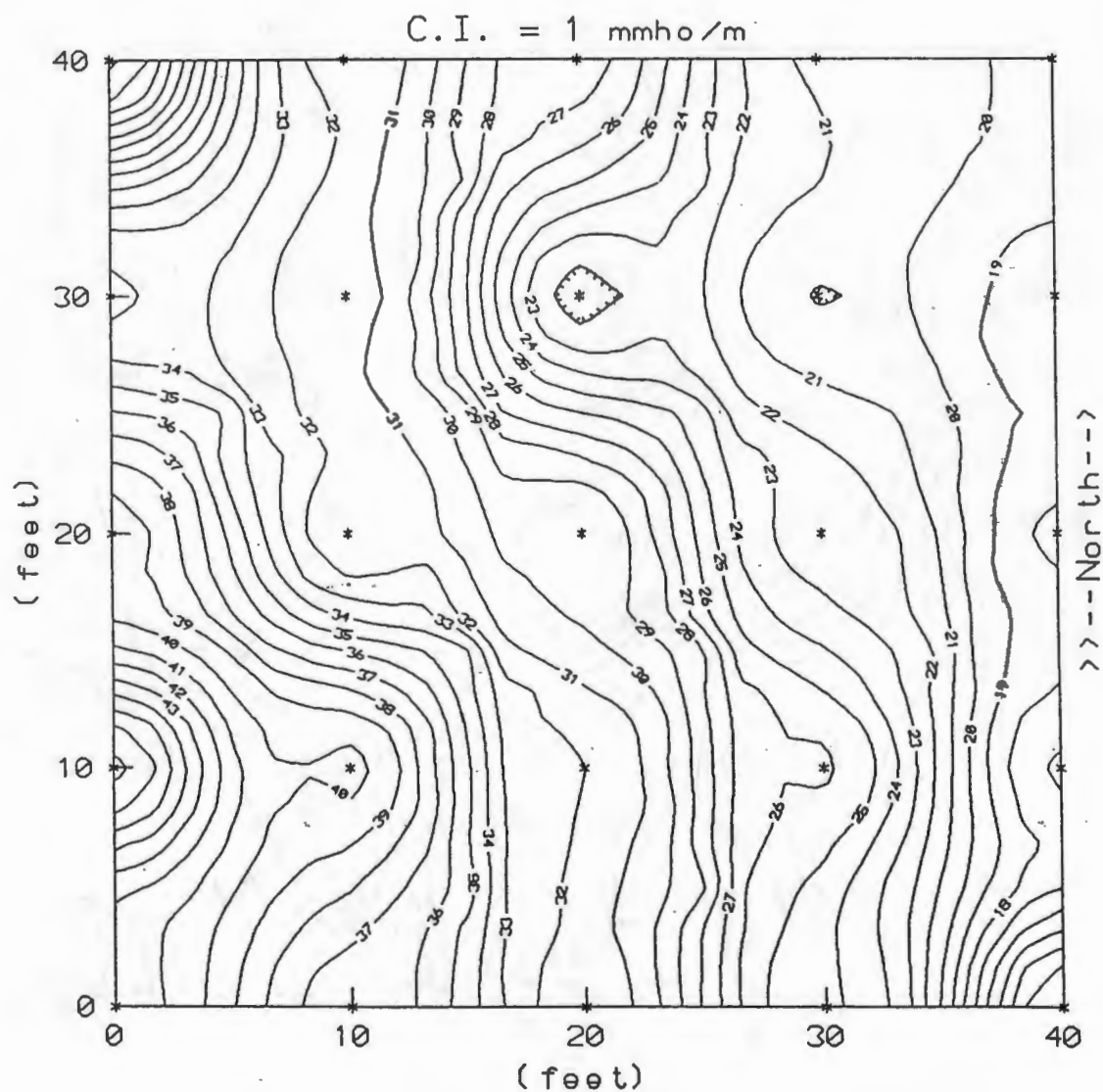
Erwin V2 Conductivity Grid 4



Erwin H1 Conductivity Grid 4

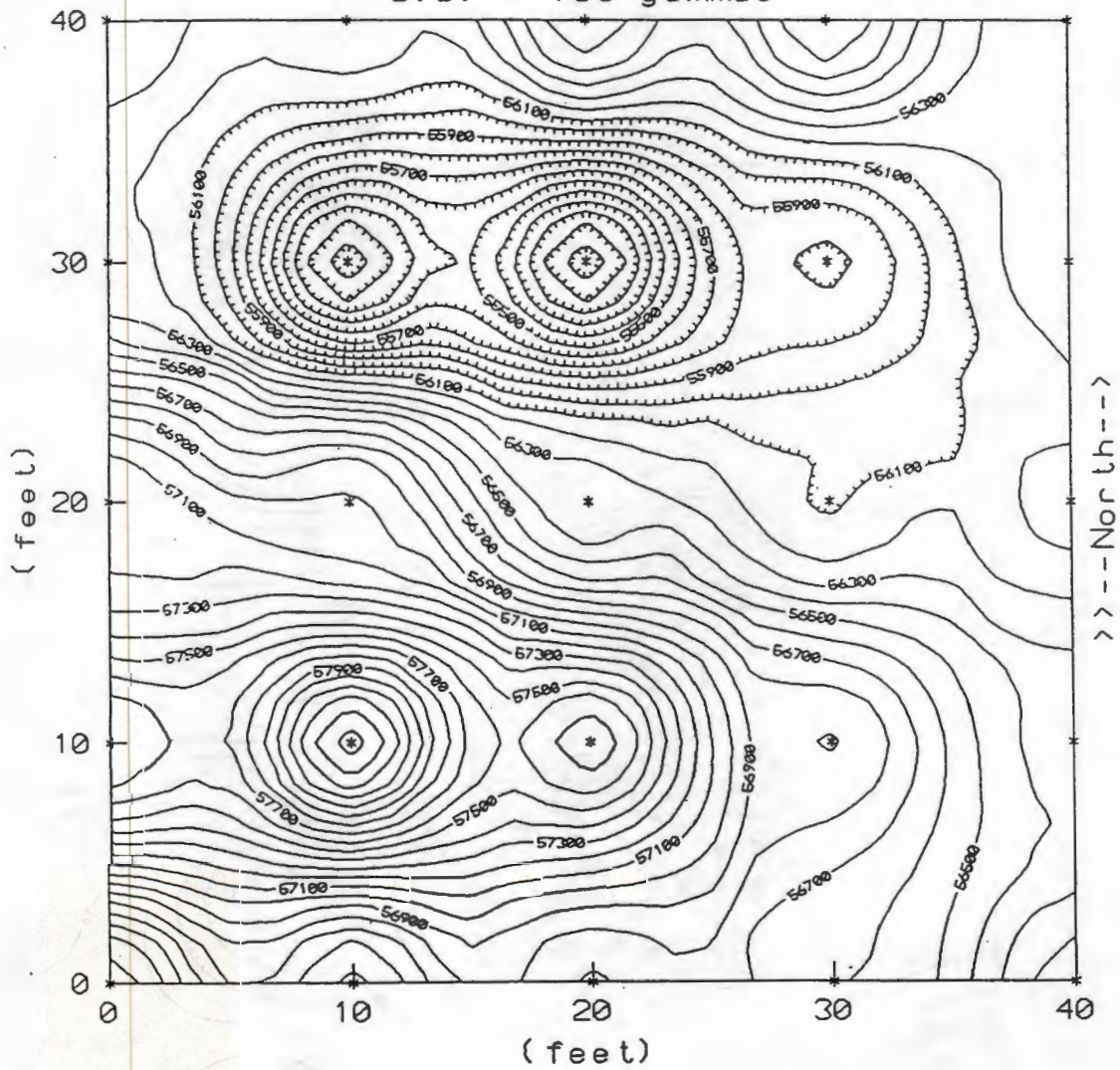


Erwin H2 Conductivity Grid 4

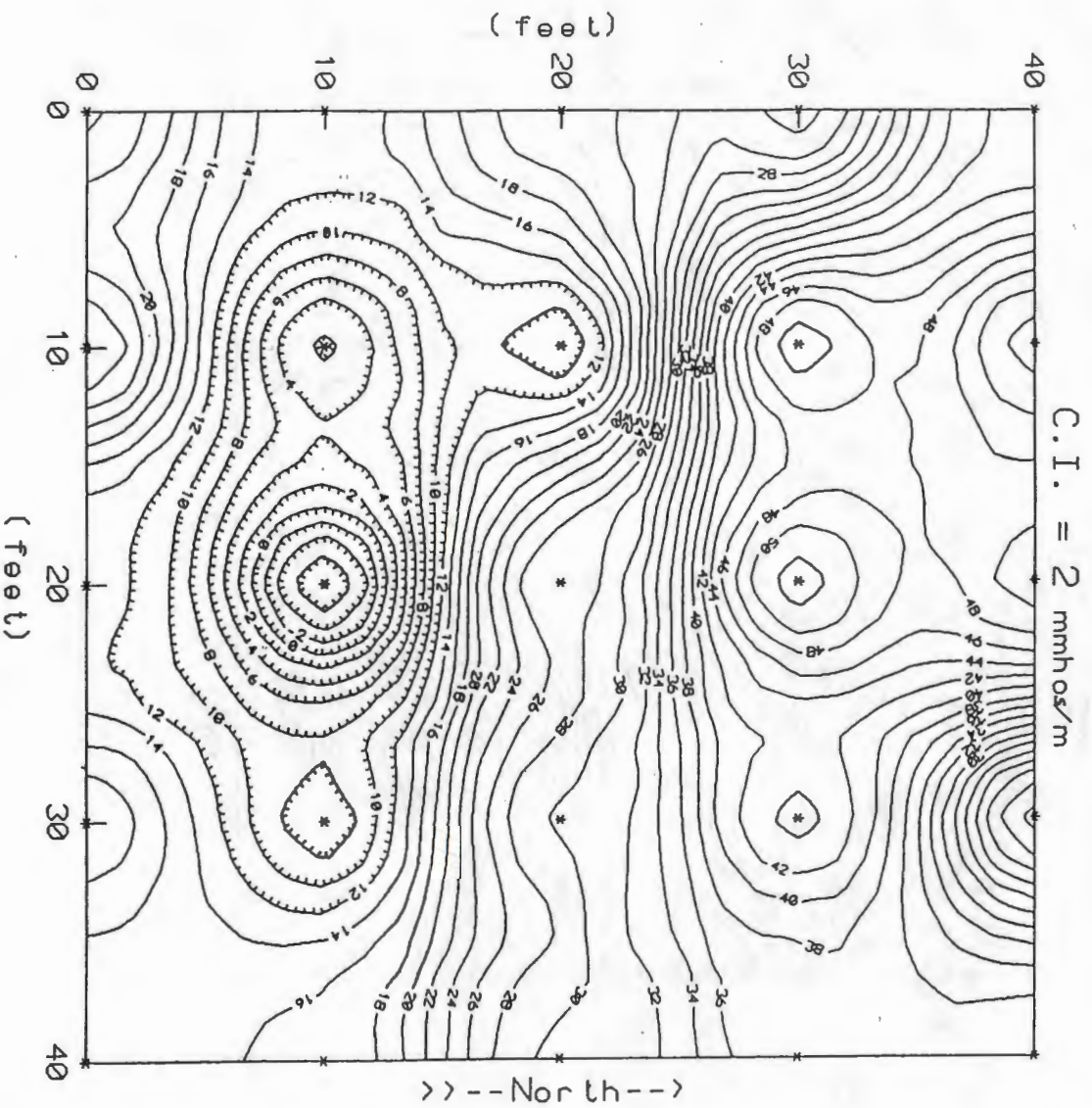


Erwin Magnetics Grid 5

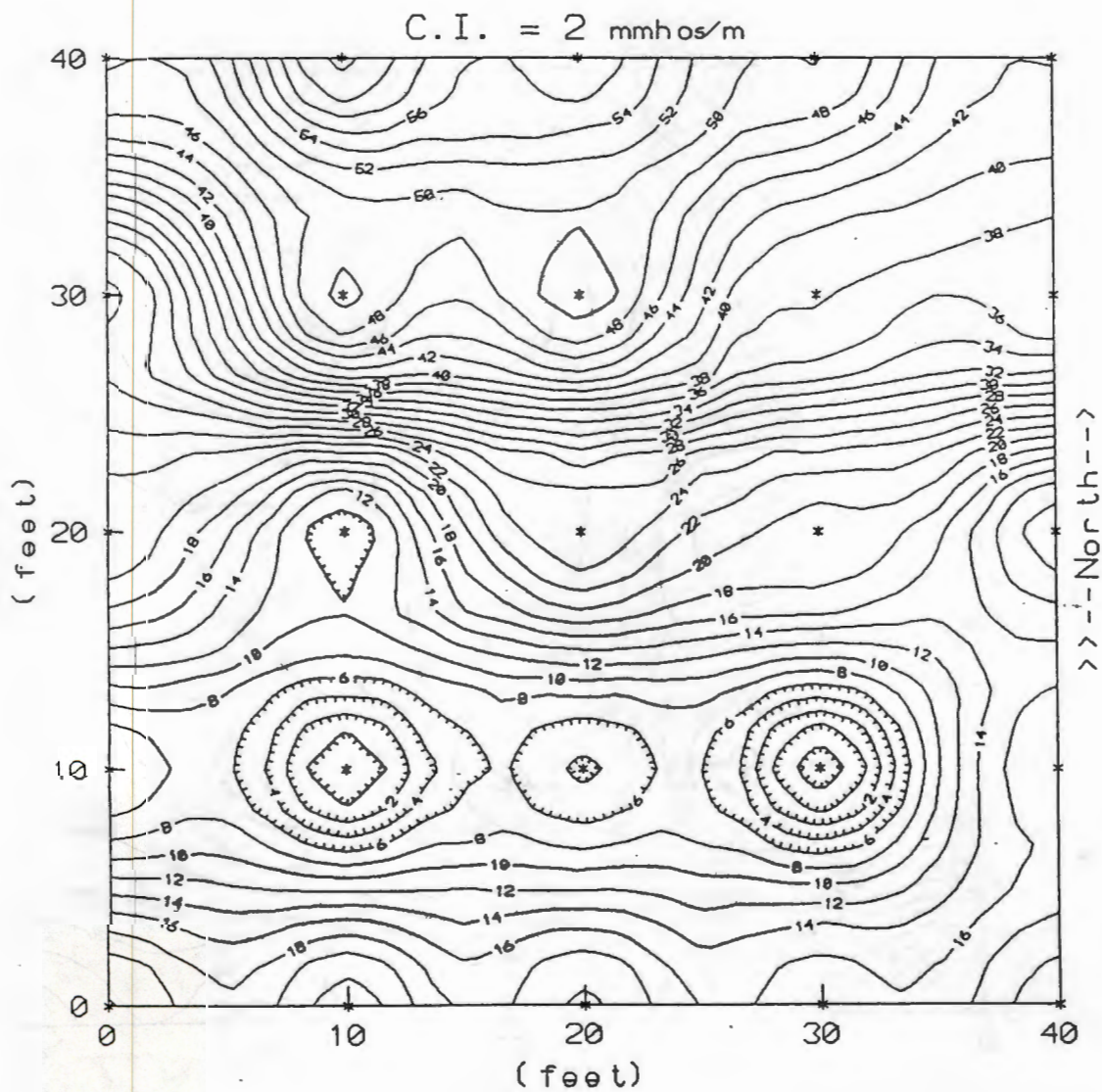
C.I. = 100 gammas



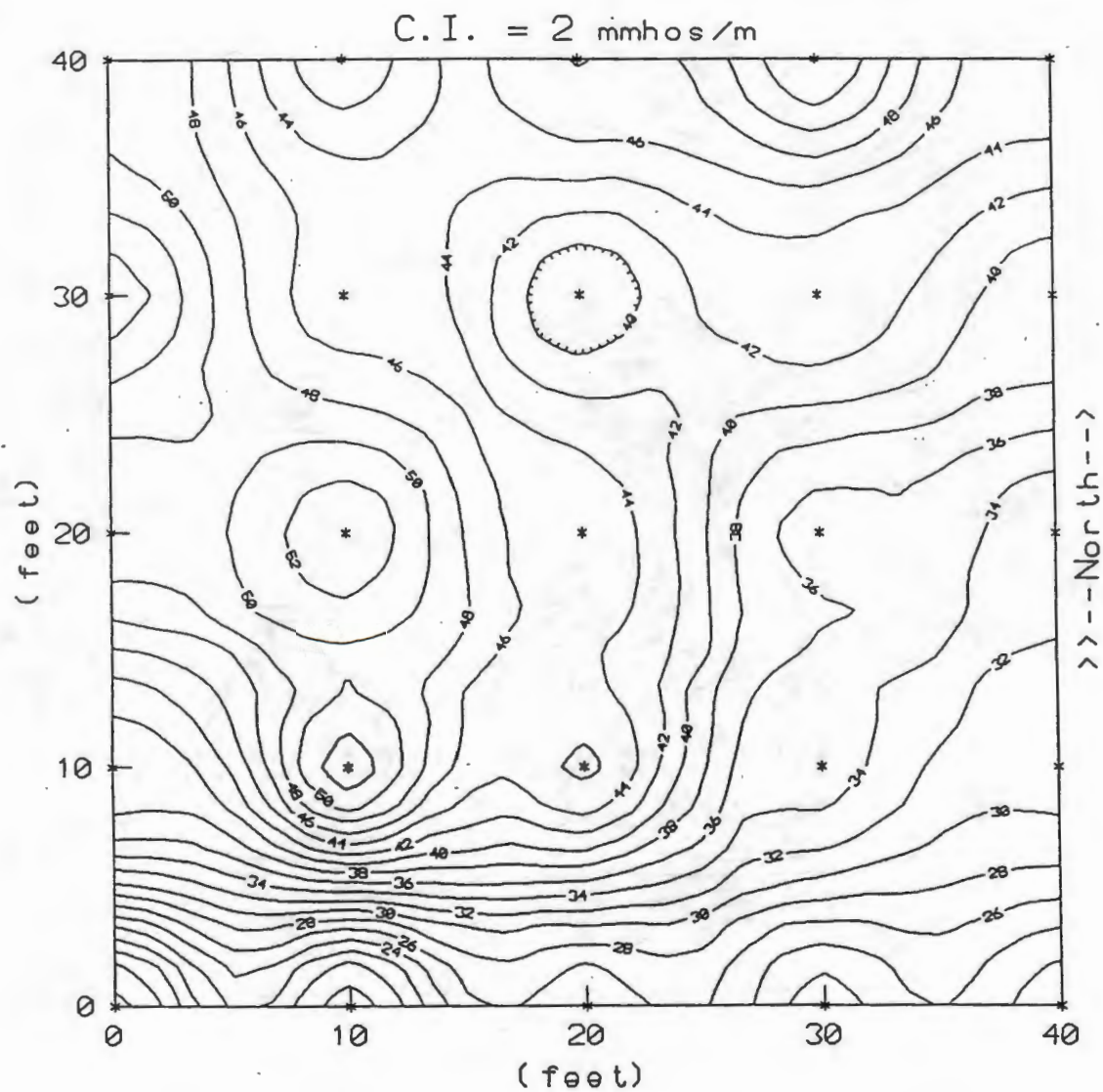
Erwin V1 Conductivity Grid 5



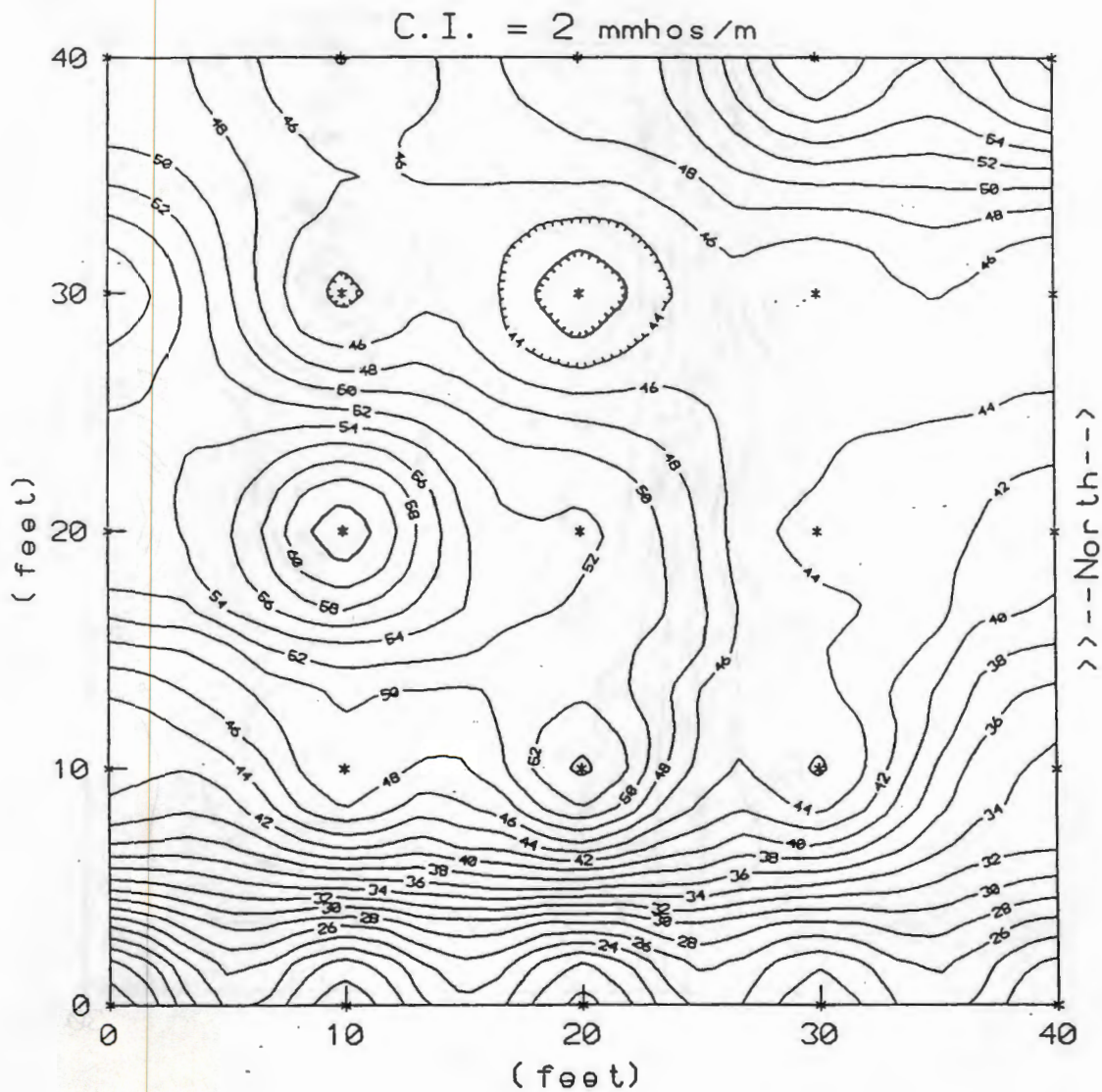
Erwin V2 Conductivity Grid 5



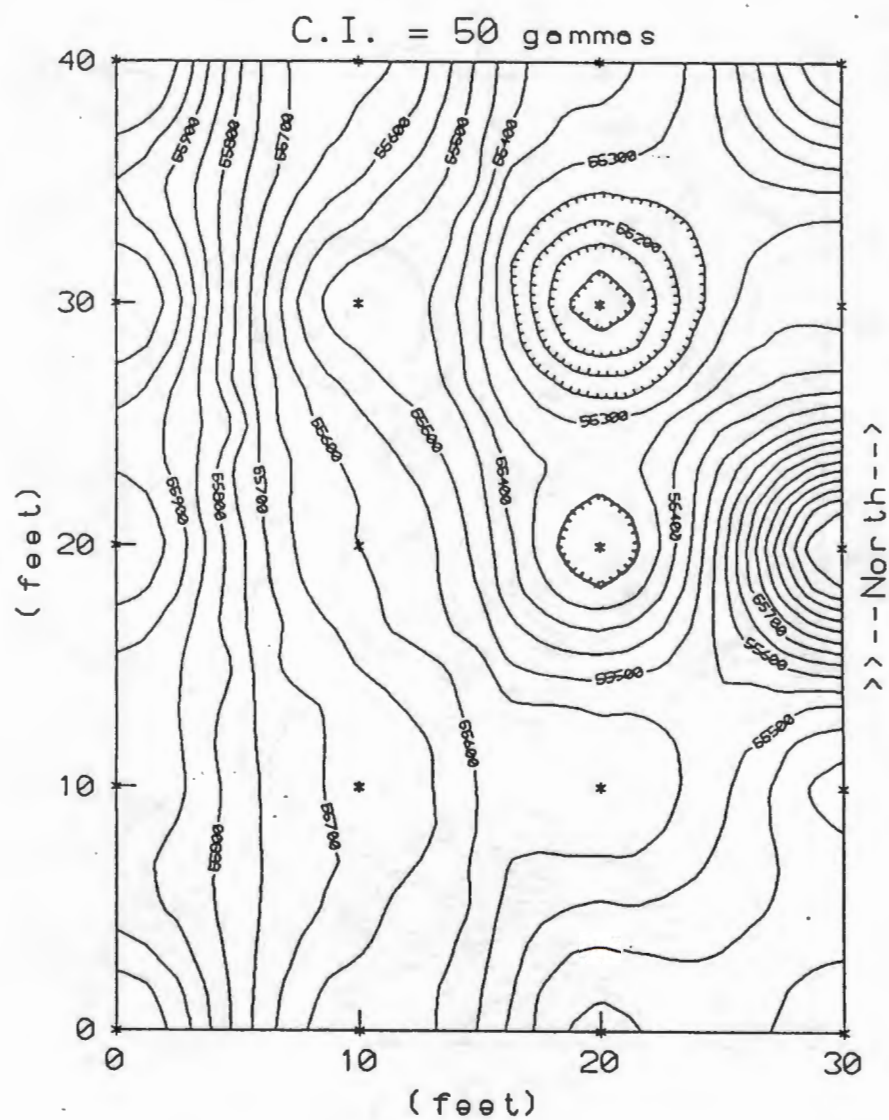
Erwin H1 Conductivity Grid 5



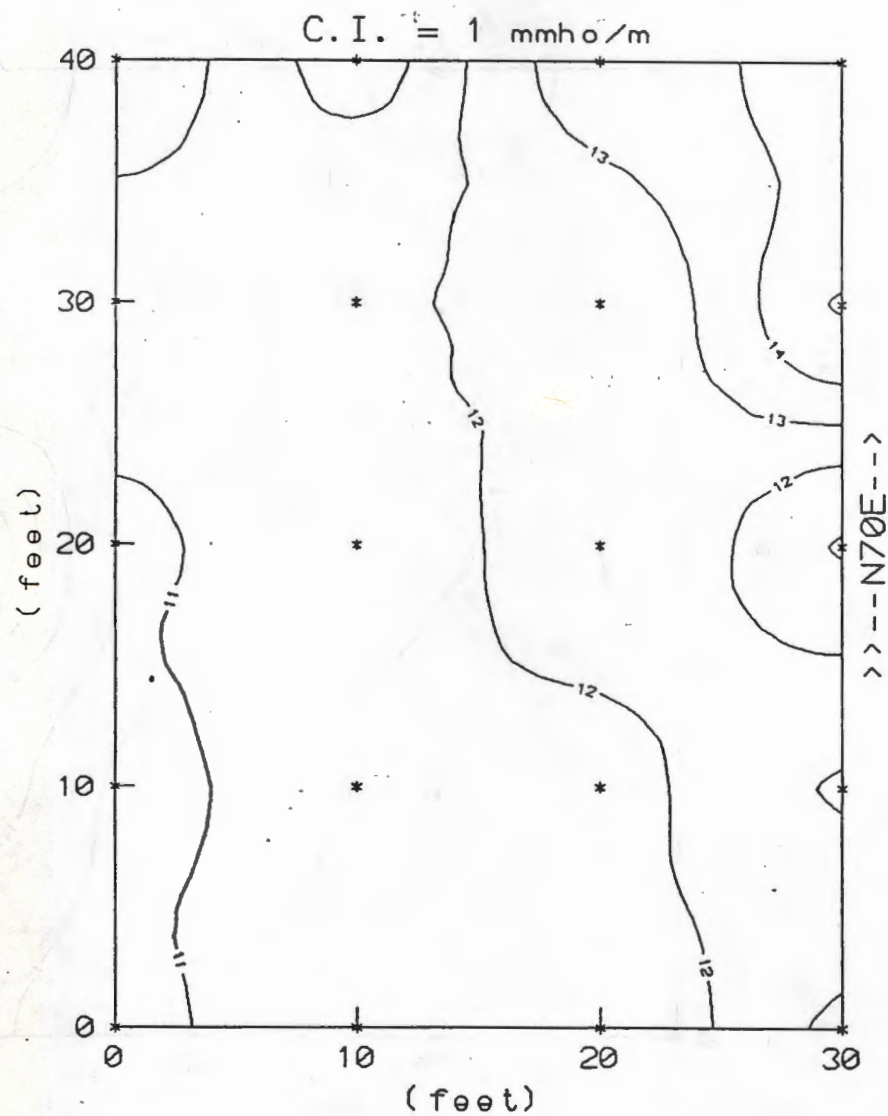
Erwin H2 Conductivity Grid 5



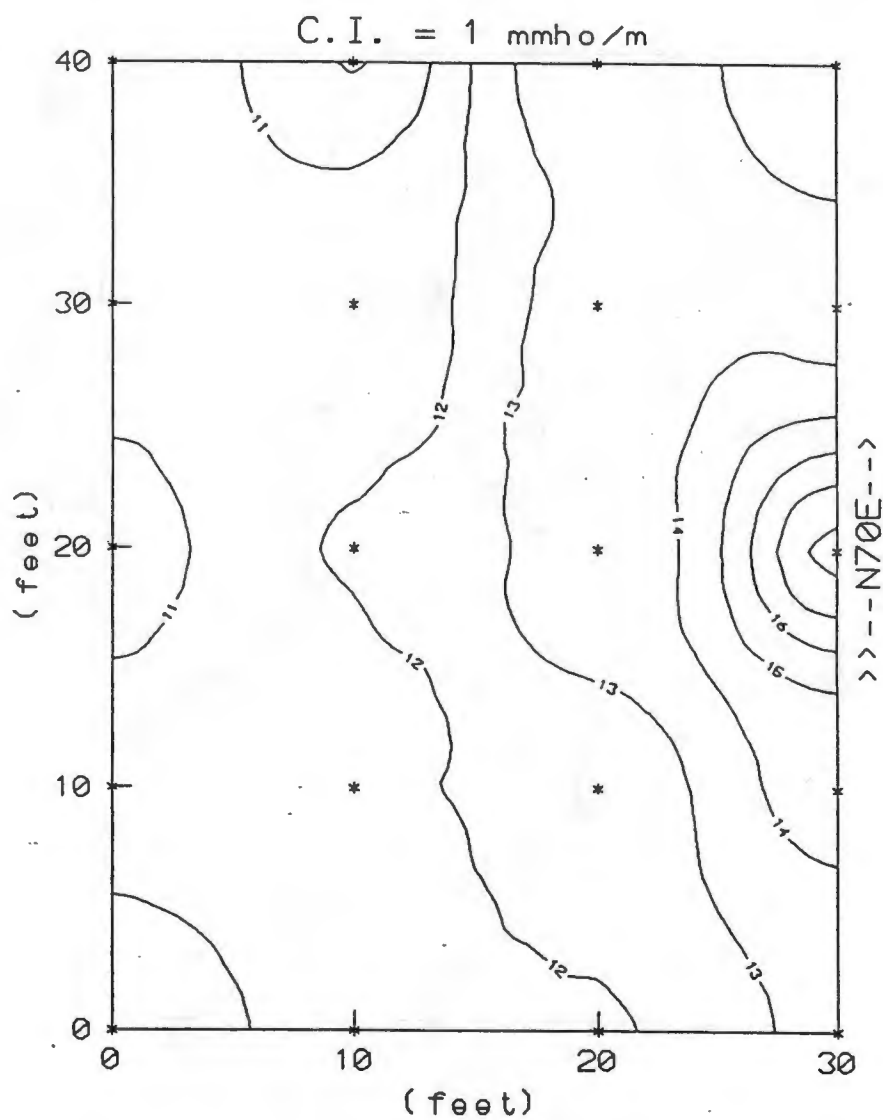
Erwin Magnetics Grid 6



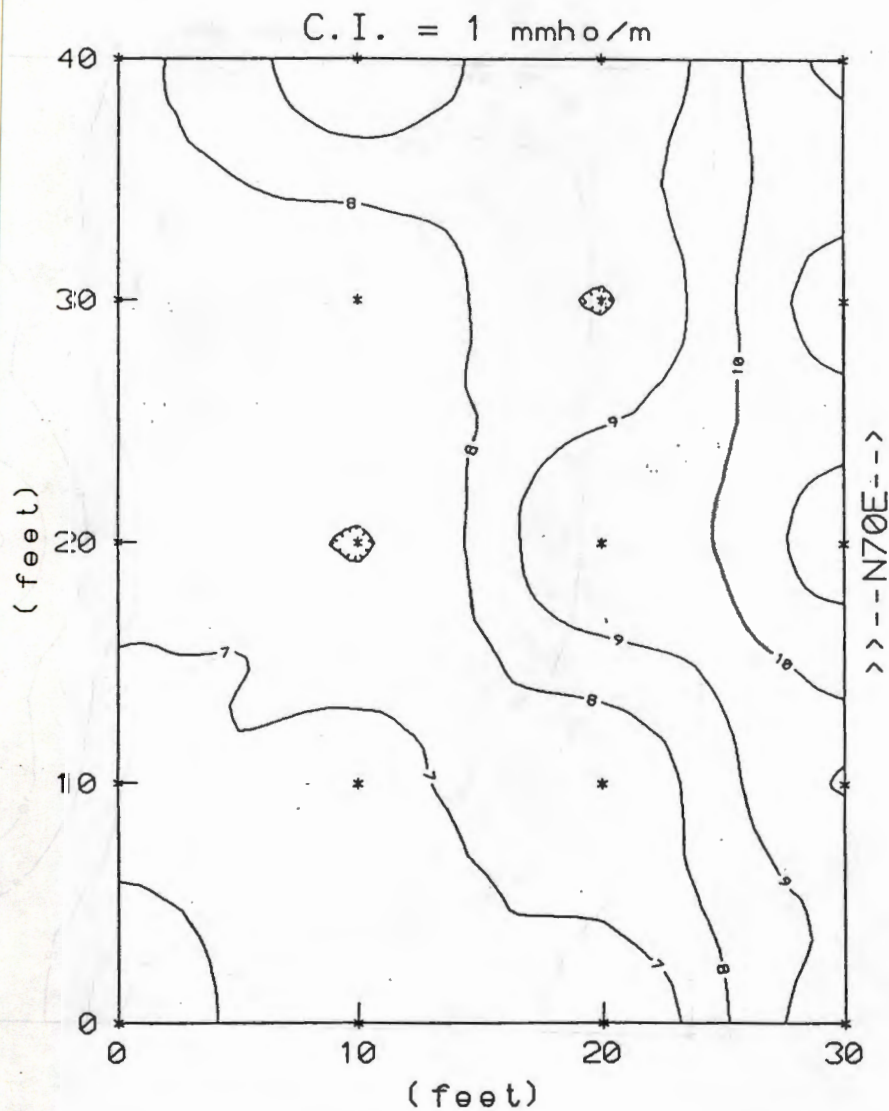
Erwin V1 Conductivity Grid 6



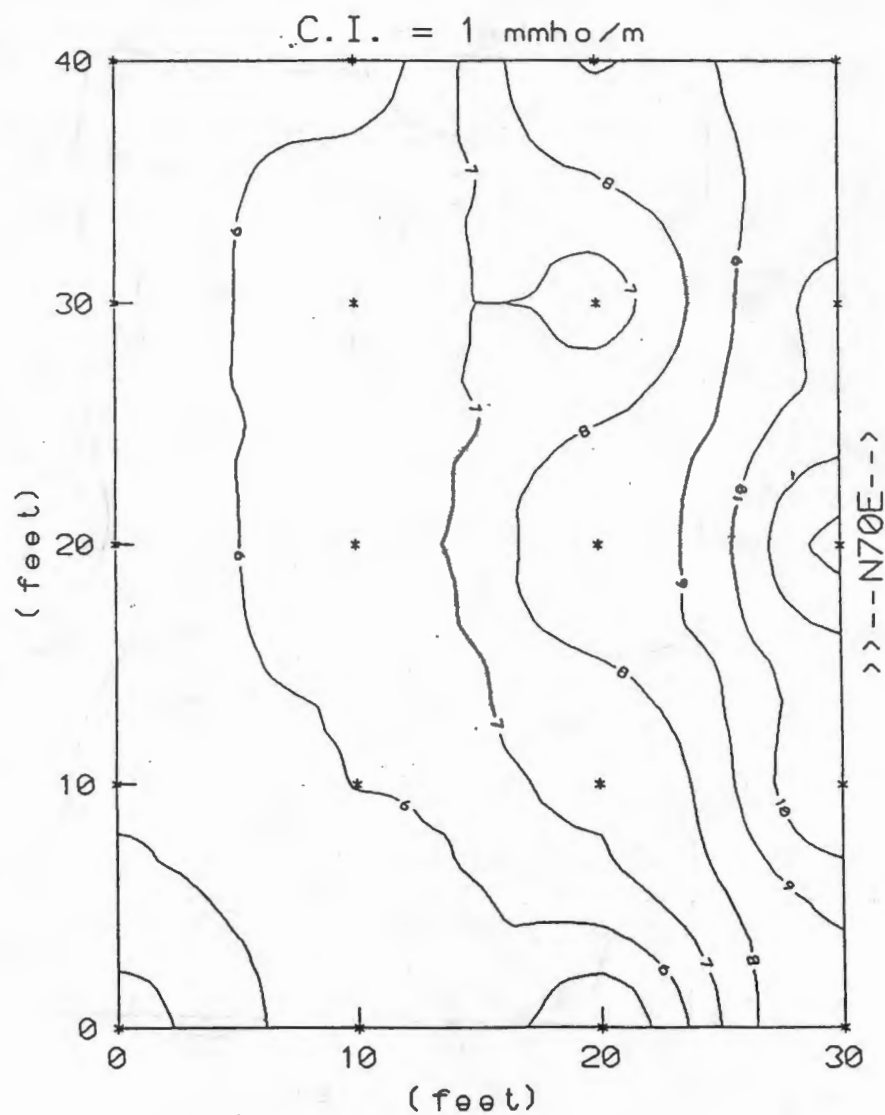
Erwin V2 Conductivity Grid 6



Erwin H1 Conductivity Grid 6



Erwin H2 Conductivity Grid 6



APPENDIX C

SUBSURFACE BORING LOGS AND WELL DIAGRAMS

C-1

APPENDIX D

GEOTECHNICAL SAMPLE ANALYSIS RESULTS

PROJECT: Erwin Landfill

REPORT NO.: CT1019S-1-10-93

CLIENT: Ecology & Environment, Inc.

DATE: November 26, 1993

TABULATION OF LABORATORY TEST RESULTS

BORING NUMBER	SAMPLE DEPTH	GRADATION ANALYSIS (ASTM D 422)												ATTERBERG LIMITS (ASTM D 4318)		
		SIEVE SIZES (% PASSING)												LL	PL	PI
		1-1/2"	1"	3/4"	1/2"	1/4"	#4	#10	#20	#40	#80	#200	.005mm			
MW-1	5.0' to 7.0'													NP	NP	NP
MW-1	14.0' to 16.0'	100	78	64	57	48	45	33	22	17	13	9	4	NP	NP	NP
MW-2	13.0' to 15.0'	100	65	65	63	62	60	57	52	47	34	25	9	NP	NP	NP
MW-2	9.0' to 11.0'													NP	NP	NP
MW-3	18.0' to 20.0'	100	74	61	51	48	47	42	33	23	17	13	6	NP	NP	NP
MW-3	16.0' to 18.0'													NP	NP	NP
MW-4	14.0' to 16.0'		100	84	72	60	58	52	36	29	23	18	9	NP	NP	NP
MW-4	12.0' to 14.0'													NP	NP	NP
MW-5	16.0' to 18.0'		100	76	64	46	43	27	19	15	11	8	4	NP	NP	NP
MW-5	5.0' to 7.0'													NP	NP	NP
MW-6	9.0' to 11.0'		100	94	71	62	60	55	40	35	31	26	10	NP	NP	NP
MW-6	17.0' to 19.0'													NP	NP	NP

NOTES: 1) Some samples may contain contaminants which could alter test results.

2) Particle Size Analyses were performed in accordance with ASTM D 422 unless the amount of sample provided by Lu Engineers was insufficient to meet minimum test sample requirements.



ATLANTIC TESTING LABORATORIES, Limited

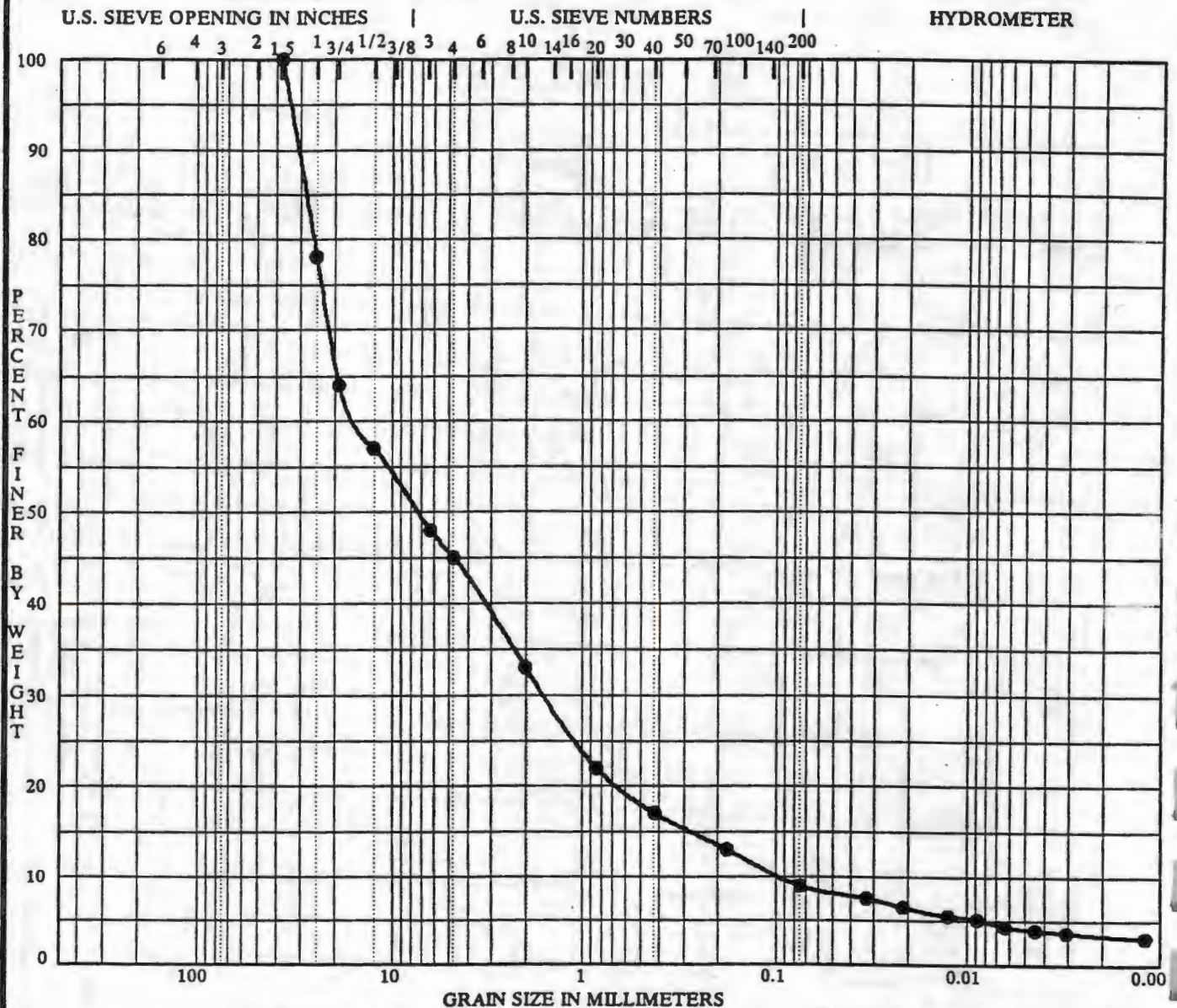
GRADATION CURVES

PROJECT Erwin Landfill

CLIENT Ecology & Environment, Inc.

REPORT NO. CT1019S-1-11-93

DATE 10/26/93



COBBLES	GRAVEL			SAND			SILT OR CLAY
	coarse	med.	fine	coarse	medium	fine	

Specimen Identification	Classification				MC%	LL	PL	PI	Cc	Cu
● MW-1	Brown cmf GRAVEL; and cmf SAND; trace SILT;					NP	NP	NP	1.80	160.2
	trace CLAY									
Depth: 14.0'-16.0'										
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
● MW-1	37.50	14.96	1.584	0.0933	55	36	5	4		
Depth: 14.0'-16.0'										

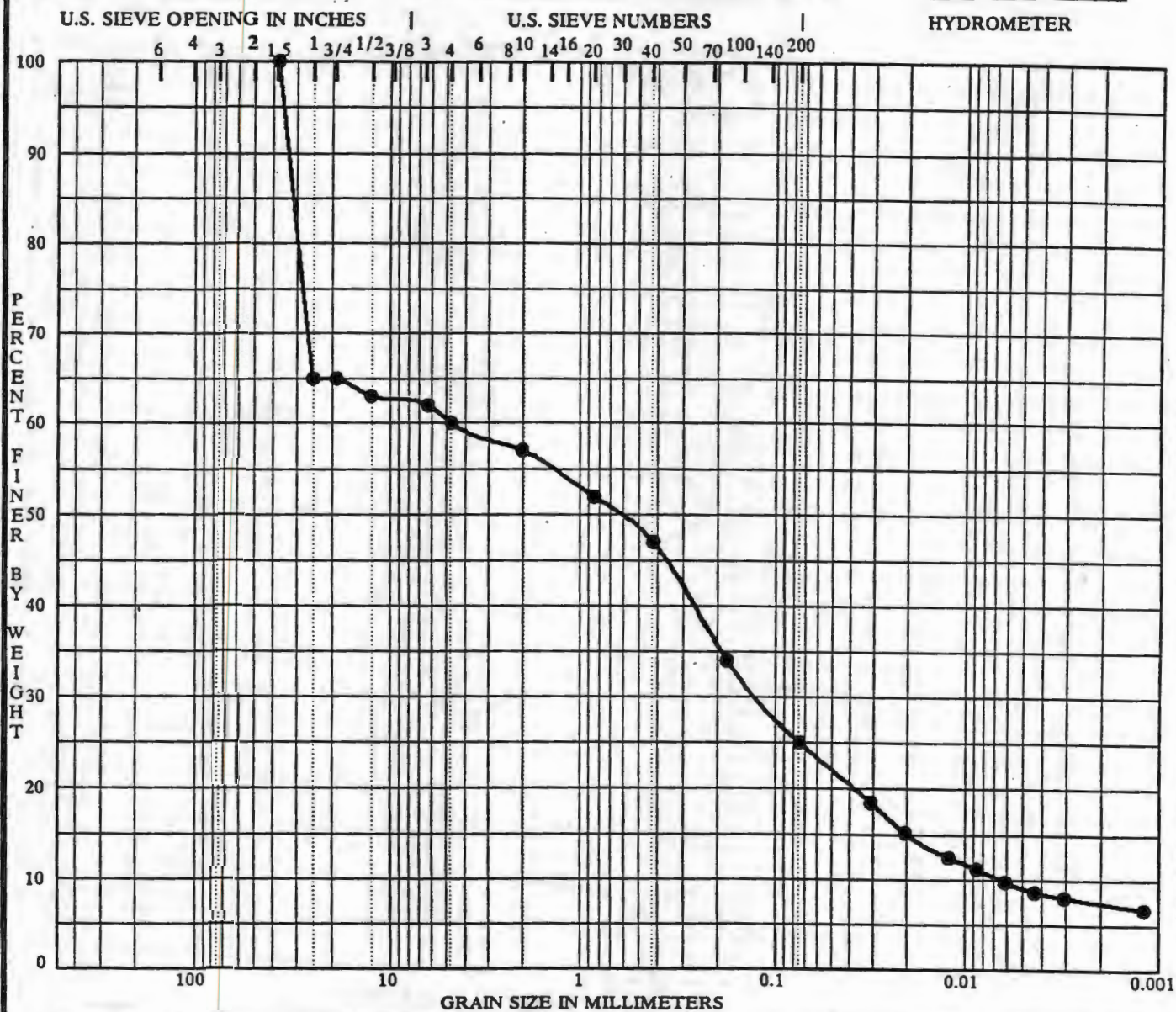


ATLANTIC TESTING LABORATORIES, Limited

GRADATION CURVES

PROJECT Erwin Landfill
CLIENT Ecology & Environment, Inc.

REPORT NO. CT1019S-1-11-93
DATE 10/26/93

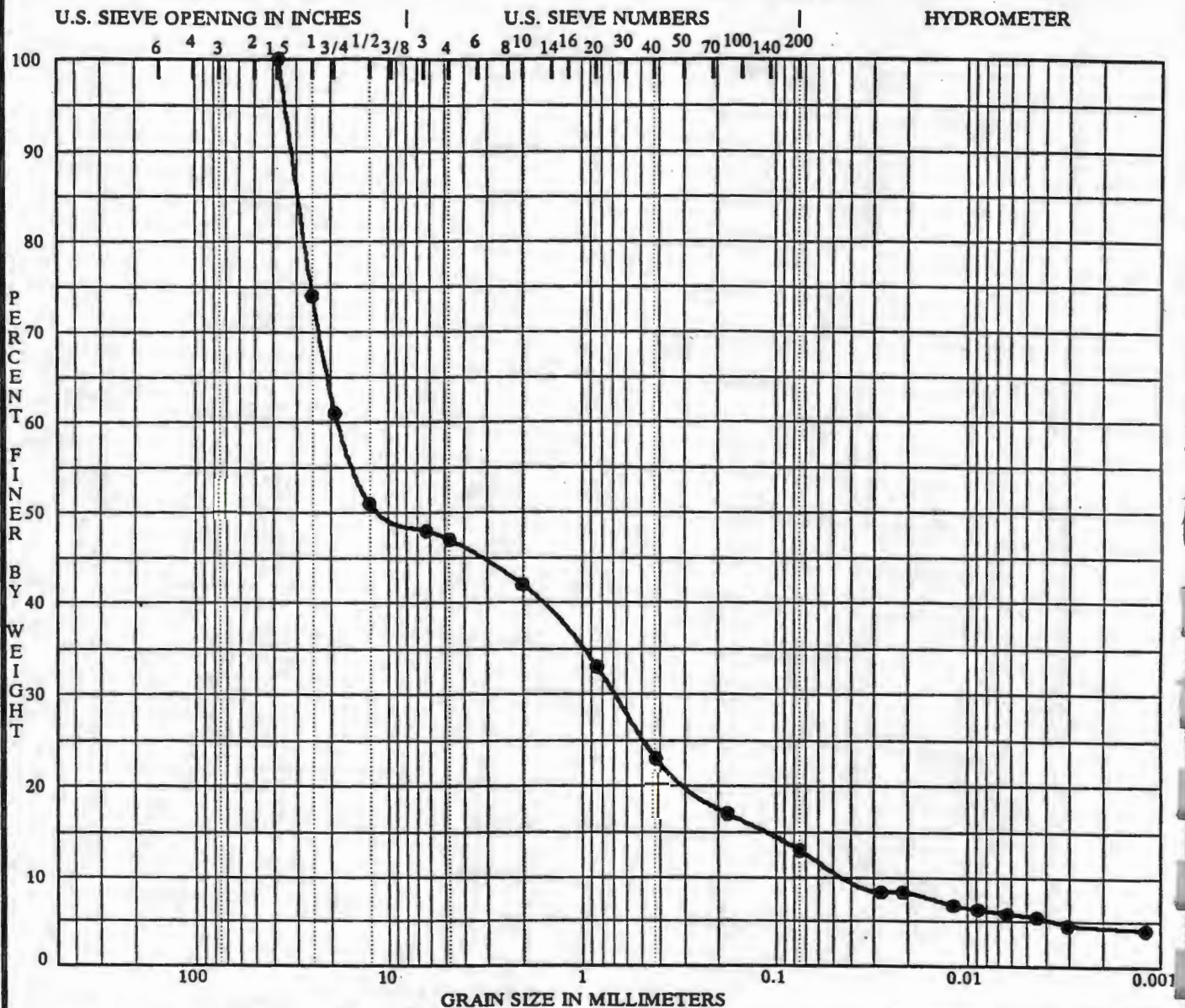


ATLANTIC TESTING LABORATORIES, Limited

GRADATION CURVES

PROJECT Erwin Landfill
CLIENT Ecology & Environment, Inc.

REPORT NO. CT1019S-1-11-93
DATE 10/26/93



atl ATLANTIC TESTING LABORATORIES, Limited

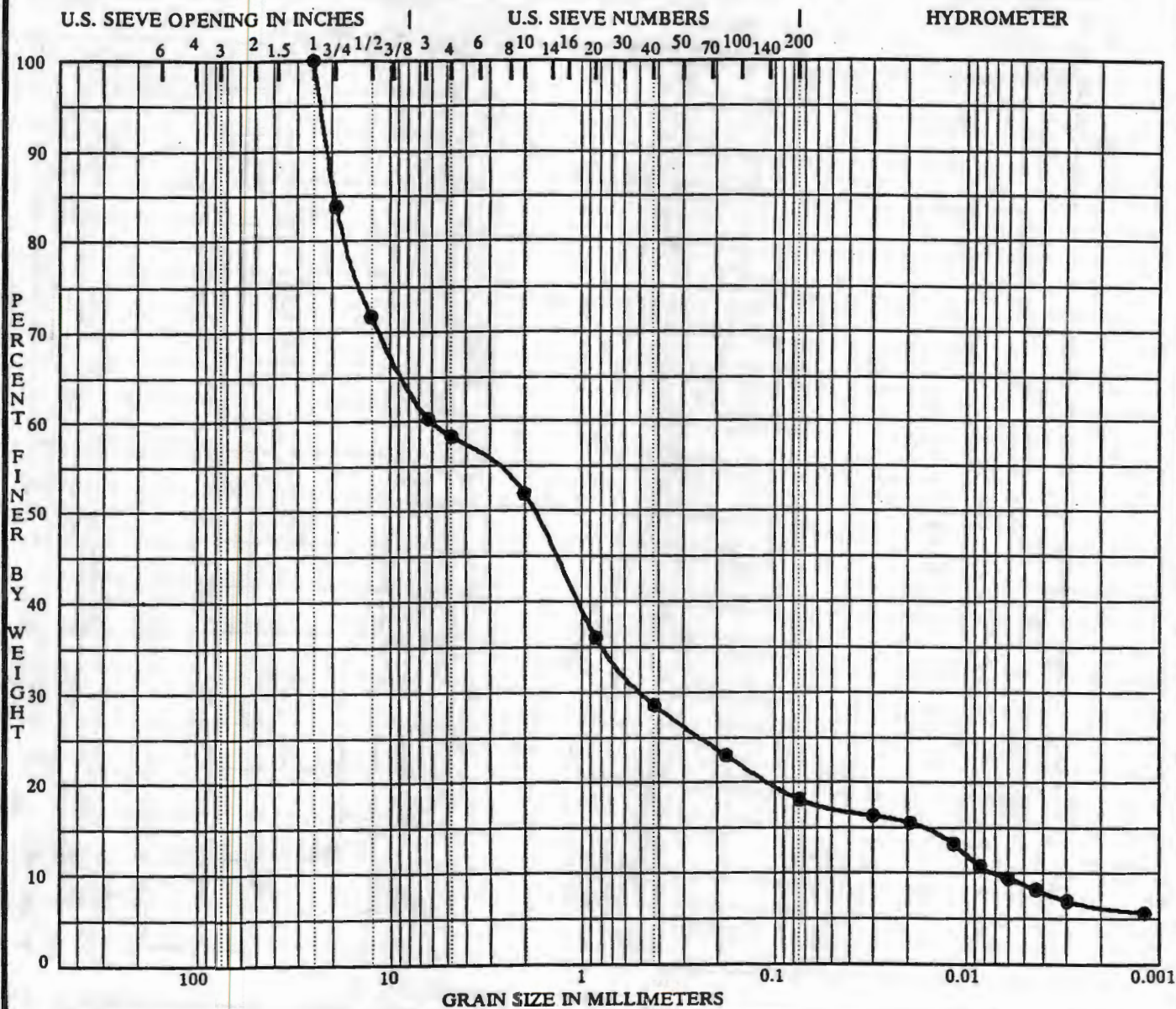
GRADATION CURVES

PROJECT Erwin Landfill

REPORT NO. CT1019S-1-11-93

CLIENT Ecology & Environment, Inc.

DATE 10/26/93

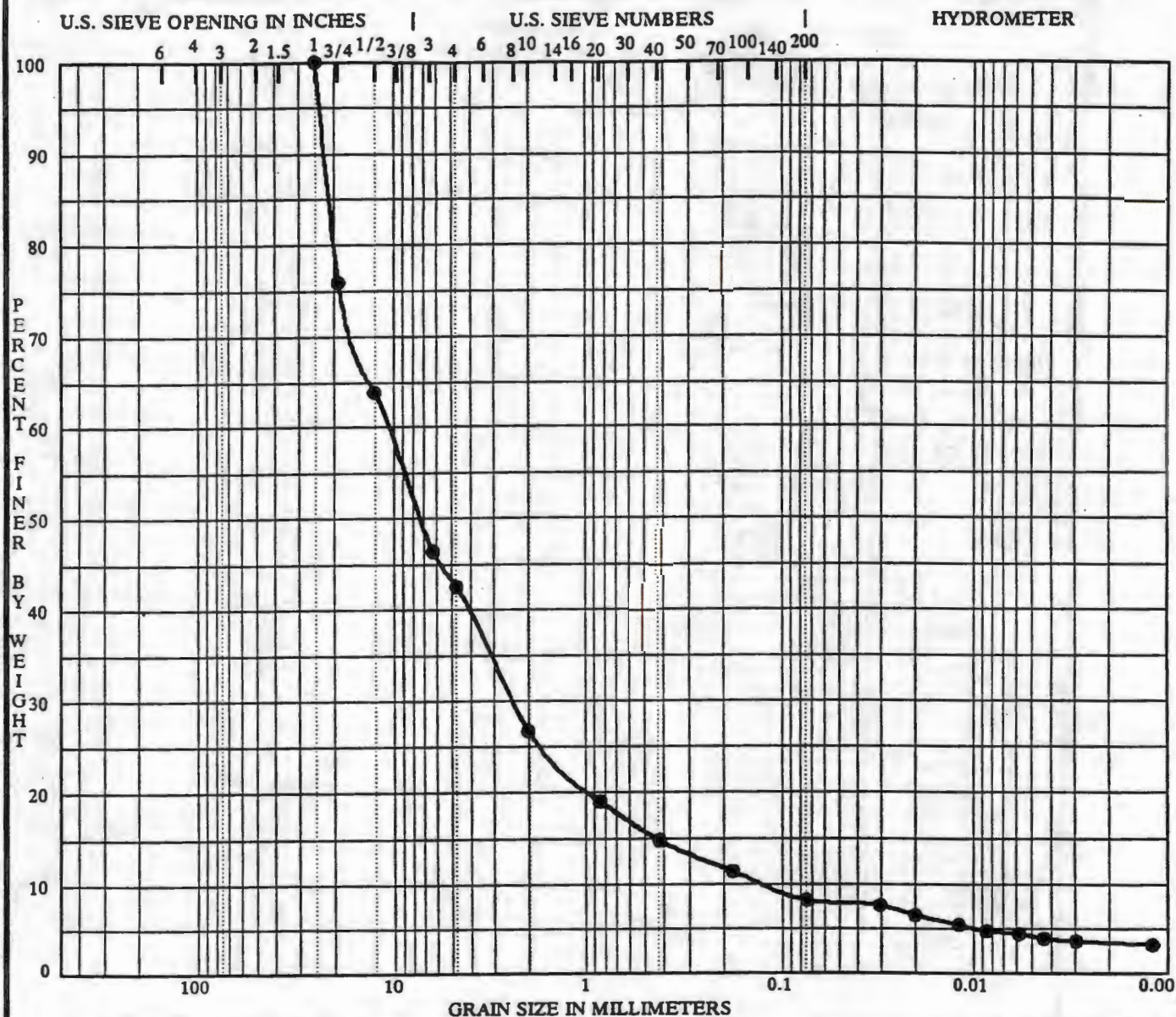


ATLANTIC TESTING LABORATORIES, Limited

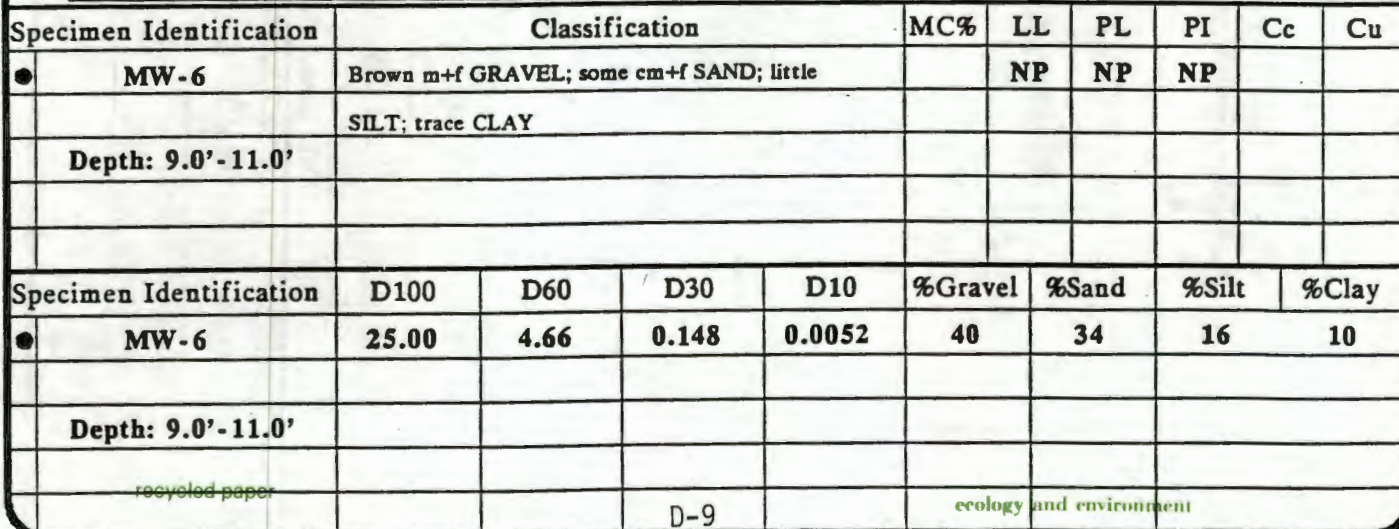
GRADATION CURVES

PROJECT Erwin Landfill
CLIENT Ecology & Environment, Inc.

REPORT NO. CT1019S-1-11-93
DATE 10/26/93



HYDROMETER



10713

CHAIN OF CUSTODY RECORD

atl ATLANTIC TESTING LABORATORIES, Limited

SCIENCE AND ENGINEERING
P.O. BOX 29
CANTON, NEW YORK 13617
315-386-4578, FAX 315-388-1012

ENVIRONMENTAL LABORATORY
48 LAGRASSE STREET
WADDINGTON, NEW YORK 13804
315-388-4452, FAX 315-388-5510

PROJECT NUMBER 70204 YR 7962		PROJECT CONTACT Marcia Liao XXXXXXXXXXXX		QA/QC CODE ☐ DEC/ASP ☐ NYSDOH ☐ CLP ☐ SW-846 ☐ OTHER		PARAMETERS										REPORT DISTRIBUTION		CUSTODY SEAL X = EQUALS INTACT		
PAGE <u>1</u> OF <u>1</u>																DATES REQUIRED: _____ SEND REPORT TO: <u>Rick Watt</u> <u>Ecology + Environment *</u> FAX RESULTS TO: _____ AT _____				
PROJECT NAME Erwin Landfill				PROJECT LOCATION Erwin, NY												LABORATORY IDENTIFICATION NUMBER: _____ FIELD NOTES: _____				
DATE		TIME		SAMPLE LOCATION		SAMPLE NO. OF TYPE *		CONT.												
10/7/93	N/A			MW1 5.0'-7.0'			1		X											Suspect Contaminants: (metals, semi-volatiles, Cu, Pesticides, PCBs, volatiles) . . . + see attached discussion * Send Copy of Results to Env. Engineers 2230 Penfield Rd. Penfield, NY 14526 Attn: Greg Andrus
10/7/93				MW1 14.0'-16.0'			1		X											
10/4/93				MW2 13.0'-15.0'			1		X											
10/4/93				MW2 9.0'-11.0'			1		X											
10/5/93				MW3 18.0'-20.0'			1		X											
10/5/93				MW3 16.0'-18.0'			1		X											
10/5-6/93				MW4 14.0'-16.0'			1		X											
10/5-6/93				MW4 12.0'-14.0'			1		X											
10/6/93				MW5 16.0'-18.0'			1		X											
10/6/93				MW5 5.0'-7.0'			1		X											
10/8/93				MW6 9.0'-11.0'			1		X											
10/8/93	✓			MW6 17.0'-19.0'			1		X											
SAMPLERS NAME: <u>Gregory L. Andrus</u>				DATE: <u>10/25/93</u>		RECEIVED FOR NAME: _____				DATE: _____		SHIPMENT REC'D								
SAMPLERS SIG: <u>[Signature]</u>				TIME: <u>15:37</u>		LABORATORY SIG: _____				TIME: _____		INTACT (YES/NO)?								
SAMPLES RELINQUISHED BY:				SAMPLES RECEIVED BY:				* SAMPLE TYPE CODE KEY				LABORATORY STORAGE LOCATION:								
NAME: <u>Greg Andrus</u> DATE: <u>10/25/93</u>				NAME: _____ DATE: _____				B = QA/QC C = COMPOSITE G = GRAB H = HEXANE SURFACE WIPES ND = NOT DETERMINED BY SAMPLER O = OIL S = SOLID OR SLUDGE W = WATER DISTRIBUTION: WHITE WITH SAMPLES GREEN TO SCIENCE AND ENGINEERING FILES, GOLD TO CLIENT				LABORATORY REMARKS								
SIG: <u>[Signature]</u> TIME: <u>15:46</u>				NAME: _____ DATE: _____																
NAME: _____ DATE: _____				NAME: _____ DATE: _____																
SIG: _____ TIME: _____				SIG: _____ TIME: _____																
NAME: _____ DATE: _____				NAME: _____ DATE: _____																
SIG: _____ TIME: _____				SIG: _____ TIME: _____																

D-10

THINK QUALITY

APPENDIX E

DATA USABILITY SUMMARY AND DATA SUMMARY FORMS

DATA USABILITY REVIEW

The data usability review for the Erwin Town Landfill site consisted of: checking chain-of-custody forms and analytical logs to confirm that samples were analyzed for the parameters requested on the chain-of-custody; and reviewing the data to confirm that NYSDEC and laboratory quality control (QC) criteria were met.

These quality control criteria included: holding times; laboratory blank contamination; surrogate recoveries; internal standards area and retention times; matrix spike/matrix spike duplicate (MS/MSD) results; instrument calibration (initial and continuing); and for metals, the specific criteria were reviewed and problems noted. These criteria included laboratory method blanks, MS/MSDs, instrument calibration, and inductively coupled plasma (ICP) interference check samples.

Based on the review described above, a memorandum was generated outlining any problems affecting the usability of the data. This memorandum was submitted to NYSDEC under separate cover as part of the reduced data package. The general problems commented on included blank contamination and holding-time violation, but it did not constitute a full data validation effort.

For the Erwin Town Landfill site, all data were considered usable as qualified by the data review with one exception. Sample SW-5, in Job 9301.702, foamed excessively while purging for volatile organic analysis, thus affecting the system monitoring compounds recoveries and internal standards recoveries. The recoveries for the compounds involved were outside the established quality control limits. The sample was subsequently diluted and reanalyzed within hold times with acceptable recoveries and responses. The values for the diluted samples are considered more acceptable. All analytical data pertaining to the site were then third-party qualified by ChemWorld Environmental, Inc. with the exception of samples from Job 9400.907, which were collected during the May 1994 sampling event. The qualified data are discussed below. Table E-1 provides a list of the PAHs analyzed for (as base/neutral extractables) and shows which are considered carcinogenic.

Data Validation

All analytical data pertaining to the Erwin Town Landfill site, with the exception of samples from Job 9400.907, which were collected during the May 1994 sampling event, were third-party validated by Chemworld Environmental, Inc. for compliance, accuracy, and

completeness. The Erwin Town Landfill Validation Report provides a summary of data acceptability and deviations in accordance with the USEPA Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses (July 1988) and the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (June 1991). Quality assurance/quality control (QA/QC) deviations cited in the Erwin Town Landfill Validation Report are summarized below.

Volatile Organics

A limit of ten times the highest methylene chloride, acetone, and 2-butanone blank values were used for review and qualification of the associated samples. Sample results of these compounds which were found to be less than the respective limit were qualified "B," to denote that the compound contamination was attributable to the blank.

A limit of five times the highest 1,1,1-TCA blank value was used for review and qualification of the associated samples. Sample results of this compound which were found to be less than the respective limit were qualified "B," to denote that the compound contamination was attributable to the blank.

Samples SD-5, SS-1 through SS-7, SS-7RE, and W-1 were qualified "J," as estimated, for the positive results, and "UJ," as estimated, for the non-detectable results, for the aromatic compounds only, due to a holding time violation of one day.

Sample W-1DL was qualified "J," as estimated, for the positive results, and "UJ," as estimated, for the non-detectable results, for the aromatic compounds only, due to a holding time violation of four days.

The storage blank in Job 9302.596 violated the holding time by two days and was qualified "UJ," as estimated, for the non-detectable results for aromatic compounds only.

Samples SW-5 and SS-7RE were qualified "J," as estimated, for the positive results, and "UJ," as estimated, for the non-detectable results, due to low surrogate recovery.

Sample W-1 was qualified "J," as estimated, for the positive results, and "UJ," as estimated, for the non-detectable results, due to high surrogate recovery.

The samples associated with the initial calibration run on August 13, 1994 were qualified "J," as estimated, for the positive results only, due to the percent relative standard deviation falling outside acceptable limits for certain compounds.

The samples associated with the continuing calibrations run on October 9, 1993 at 01:54, October 12, 1993 at 22:21, October 13, 1993 at 21:29, November 10, 1993 at 03:19, November 11, 1993 at 19:19, and November 15, 1993 at 20:38 were qualified "UJ," as estimated, for non-detectable results, due to the percent difference falling outside acceptable limits for certain compounds.

Samples W-1, W-1DL, SW-5, SS-3, SS-7, and SS-7RE were qualified "J," as estimated, for the positive results and "UJ," as estimated, for the non-detectable results for the compounds associated with the internal standards generated outside the acceptable specifications for area count.

Semivolatiles

A limit of ten times the highest bis(2-ethylhexyl)phthalate, and five times the remaining blank values were used for review and qualification of the associated samples. Sample results which were found to be less than the respective limit were qualified "B," to denote that compound contamination was attributable to the blank.

Sample D-1 was qualified "J," as estimated, for the positive results, and "UJ," as estimated, for the non-detectable results, due to a holding time violation of nine days.

Sample MW-5A was qualified "R," as rejected and unusable, for the non-detectable results, due to a holding time violation of 24 days. Positive results were not detected for this sample.

Samples MW-5 through MW-7 were qualified "J," as estimated, for the positive results, and "UJ," as estimated, for the non-detectable results for the base-neutral extractable organics only, due to surrogate recoveries generated outside acceptable limits.

The samples associated with the continuing calibrations run on October 30, 1993 at 10:37 and November 1, 1993 at 15:54 were qualified "J," as estimated, for the positive results, and "UJ," as estimated, for the non-detectable results due to the percent difference falling outside acceptable limits for certain compounds.

Samples SW-5 and SW-5RE were qualified "UJ," as estimated, for the non-detectable results for compounds associated with the internal standards chrysene-d12 and perylene -d12, respectively, due to area counts falling outside of acceptable limits.

Pesticides/PCBs

Sample SS-1 was qualified "J," as estimated, for the Aroclor 1260 positive result, and "UJ," as estimated, for the remaining non-detectable results due to a holding-time violation of three days.

Sample DW-1 was extracted 1 day beyond the acceptable holding time, and was qualified "UJ," as estimated, for the non-detectable pesticide/PCB results. Positive results were not detected for pesticide/PCBs.

Endrin and methoxychlor in samples associated with the performance evaluation mixtures performed on November 23, 1993 at 18:34 and November 2, 1993 at 23:37 were qualified "J," as estimated, for the positive results, and "UJ," as estimated, for the non-detectable results due to the relative percent difference (% RPD) falling outside acceptable limits.

Methoxychlor in samples associated with the performance evaluation mixtures performed on August 31, 1993 at 22:22 and 22:33 were qualified "UJ," as estimated, for the non-detectable results, due to the % RPD falling outside acceptable limits. Positive results were not detected for methoxychlor.

Methoxychlor in samples associated with the calibration linearity performed on November 1, 1993 were qualified previously for the % RPD in performance evaluation mixtures falling outside acceptable limits. Additional qualification is not required.

Endrin ketone, endrin aldehyde, and methoxychlor in samples associated with the calibration linearity performed on November 23, 1993 were qualified "UJ," as estimated, for the non-detectable results due to relative standard deviation falling outside acceptable limits. Positive results were not detected for the affected compounds.

Sample SW-5 was qualified "UJ," as estimated, for non-detectable results due to low surrogate recovery. Positive results were not detected for this sample.

Samples associated with the calibration individual standard mixtures performed on August 31, 1993 at 13:57, September 1, 1993 at 13:47, October 24, 1993 at 04:30 and 05:16, and November 2, 1993 at 16:30 and 17:18 for heptachlor, dieldrin, endrin, methoxychlor, endrin ketone, 4,4'-DDD, and/or 4,4'-DDT were qualified "J," as estimated, for the positive results and "UJ," as estimated, for the non-detectable results due to the % RPD falling outside acceptable limits.

Samples associated with the GPC calibration performed on August 26, 1993 for endrin were qualified "J," as estimated, for the positive results and "R", as rejected and unusable for the non-detectable results due to a recovery of less than 10%.

Samples associated with the percent difference of GC qualitative analysis falling outside acceptable limits were qualified "J," as estimated, for the positive results for certain compounds only.

Samples associated with the GPC calibration performed on October 23, 1993 for endrin were qualified "J," as estimated, for the positive results, and "UJ," as estimated, for the non-detectable results due to the percent recovery falling outside acceptable limits.

Inorganics

Samples SW-5 and MW-1 were qualified "J," as estimated, for the positive results and "UJ," as estimated, for the non-detectable results due to lack of field preservation.

Sample SS-2 was qualified "J," as estimated, for the positive results and "UJ," as estimated, for the non-detectable results for selenium and cyanide due to matrix spike recovery falling outside acceptable limits.

Sample SW-2 was qualified "J," as estimated, for the positive results and "UJ," as estimated, for the non-detectable results for selenium due to matrix spike recovery falling outside acceptable limits.

Sample MW-5A was qualified "J," as estimated, for the positive results for manganese and antimony and "UJ," as estimated, for the non-detectable results for antimony only, due to matrix spike recovery falling outside acceptable limits.

Sample MW-2 was qualified "J," as estimated, for the positive results and "UJ," as estimated, for the non-detectable results for mercury and thallium due to matrix spike recovery falling outside acceptable limits.

Sample MW-5A was qualified "J," as estimated, for the positive results for calcium due to %RPD falling outside acceptable limits.

Sample SW-5 was qualified "J," as estimated, for the positive results for sodium due to the percent difference falling outside acceptable limits.

Sample SW-5 was qualified "J," as estimated, for the positive results for thallium due to the correlation coefficient for the method of standard addition (MSA) falling outside acceptable limits.

Sample MW-2 was qualified "J," as estimated, for the positive results for lead due to the correlation coefficient for the MSA falling outside acceptable limits.

A limit of five times the highest respective blank values were used for review and qualification of the associated inorganic samples. Sample results which were found to be less than the respective blank limit were qualified "B," denoting compound contamination was attributed to the blank. Affected analytes include aluminum and zinc from Job 9301.702 and aluminum, manganese, potassium, and zinc from Job 9302.255.

Water results exceeding 50 times the internal detection limit for manganese in sample SW-3 were qualified "J," as estimated.

These data validation reports have been reviewed for content and consistency by an E & E QA/QC chemist. All analytical data are considered usable for the purposes of this report, with the exception of the initial volatile analysis of sample SW-5, as discussed previously. Also, the non-detectable endrin results associated with the GPC calibration performed on August 26, 1993 and the non-detectable results of sample MW-5A are qualified "R," as rejected and unusable due to very low percent recovery and a holding time violation of 24 days, respectively. However, as "R" qualifications of data in these cases involved no positive results, the unusability of these specific results does not impact the interpretations made in this report.

The qualifiers "UJ" and "B" were changed to "ND" in the report tables to show that actual site contamination was not detected in the associated samples.

Defined Qualifiers

- B** Indicates the analyte is found in the associated blank as well as in the sample.
- J** Indicates the value is estimated.
- UJ** Indicates the quantitation limits are estimated.
- A** Indicates that a TIC is a suspected aldol-condensation product.
- N** Indicates presumptive evidence of a compound. Used only for TICs where the identification is based on a mass spectral library search.

- E Indicates that the instrument calibration range for that compound was exceeded and the value was estimated.
- R Indicates data is rejected and unusable.

Table E-1
POLYNUCLEAR AROMATIC HYDROCARBON (PAH) ANALYSIS LIST
Naphthalene
2-Methylnaphthalene
2-Chloronaphthalene
Acenaphthylene
Acenaphthene
Fluorene
Phenanthrene
Anthracene
Fluoranthene
Pyrene
Benzo(a)anthracene ^a
Chrysene ^a
Benzo(b)fluoranthene ^a
Benzo(k)fluoranthene ^a
Benzo(a)pyrene ^a
Indeno(1,2,3-cd)pyrene ^a
Dibenz(a,h)anthracene ^a
Benzo(g,h,i)perylene

^a Considered carcinogenic (Department of Health and Human Services, 1993).

DATA SUMMARY FORM: VOLATILES 1

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
($\mu\text{g/kg}$)

Job Number: 9301.702 Sampling Date(s): 8-12-93

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: VOLATILES 1

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
($\mu\text{g/kg}$)

Job Number: 9301-702 Sampling Date(s): 8-6-93

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

[illegible]

CRQL = Contract Required Quantitation Limit.

Site Name: ERWIN TOWN LANDFILL

Job Number: 9301-702 Sampling Date(s): 8-6-93

To calculate sample quantitation limit:
 $(\text{CRQL} \div \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: VOLATILES 1

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
($\mu\text{g/kg}$)

Job Number: 9301.702 Sampling Date(s): 8-6-93

To calculate sample quantitation limit:
 $(CRQL \cdot \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

To calculate sample quantitation limit:
(CRQL ÷ Dilution Factor) / [(100 - % moisture)/100]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: VOLATILES 1

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES

Job Number: 9301-702 Sampling Date(s): 8-6-93

To calculate sample quantitation limit:
 $(CRQL \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

To calculate sample quantitation limit:
(CRQL ÷ Dilution Factor)

[illegible]

CRQL = Contract Required Quantitation Limit.

Site Name: ERWIN TOWN LANDFILL

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

Job Number: 9301.702 Sampling Date(s): 8-6-93

[illegible]

02:Y57900_D4452-TWDS-02/15/94-DI

DATA SUMMARY FORM: VOLATILES 1

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
($\mu\text{g/L}$)Job Number: 9301-702 Sampling Date(s): 8-6-93To calculate sample quantitation limit:
(CRQL $\times$ Dilution Factor)

CRQL	Sample Number: Dilution Factor: Location: Compound	TB-YR7-8693	VBLKW1	VBLKW2	MSB	SW-2MS	SW-2MSD		
		1.0	1.0	1.0	1.0	1.0	1.0		
		TRIP BLANK	METHOD BLANK	METHOD BLANK	MATRIX SPIKE BLANK	MATRIX SPIKE	MATRIX SPIKE DUPLICATE		
10	Chloromethane	56							
10	Bromomethane								
10	Vinyl chloride								
10	Chloroethane	8 J							
10	Methylene chloride			18	6 B	3 JB	3 JB		
10	Acetone	67							
10	Carbon disulfide	3 J							
10	1,1-Dichloroethene				45	50	51		
10	1,1-Dichloroethane								
10	Total 1,2-Dichloroethene								
10	Chloroform								
10	1,2-Dichloroethane	44							
10	2-Butanone								
10	1,1,1-Trichloroethane								
10	Carbon tetrachloride								
10	Bromodichloromethane								
					</				

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

02:Y57900 D4452-TWDS-02/15/94-DI

DATA SUMMARY FORM: E N A S 1

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES

Job Number: 9301.702 Sampling Date(s): 8-6-93

(µg/kg)

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((1 - % moisture)/100)

CRQL	Compound	Sample Number:	SD-1	SD-2	SD-3	SD-4	SD-5	W-1		
		Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0		
		% Moisture:	30	25	24	50	37	15		
		Location:								
330	Phenol							490		
330	bis(2-Chloroethyl)ether									
330	2-Chlorophenol									
330	1,3-Dichlorobenzene									
330	1,4-Dichlorobenzene									
330	1,2-Dichlorobenzene									
330	2-Methylphenol									
330	2,2'-oxybis(1-chloropropane)									
330	4-Methylphenol							1400		
330	N-Nitroso-di-n-propylamine									
330	Hexachloroethane									
330	Nitrobenzene									
330	Isophorone									
330	2-Nitrophenol									
330	2,4-Dimethylphenol									
330	bis(2-Chloroethoxy)methane									
330	2,4-Dichlorophenol									
330	1,2,4-Trichlorobenzene									
330	Naphthalene									
330	4-Chloroaniline									

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 2

Site Name: ERWIN TOWN LANDFILLSOIL SAMPLES
(µg/kg)Job Number: 9301-702 Sampling Date(s): 8-6-93To calculate sample quantitation limit:
(CRQL • Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SD-1	SD-2	SD-3	SD-4	SD-5	W-1		
		Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0		
		% Moisture:	30	25	24	50	37	15		
		Location:								
330	Hexachlorobutadiene									
330	4-Chloro-3-methylphenol									
330	2-Methylnaphthalene									
330	Hexachlorocyclopentadiene									
330	2,4,6-Trichlorophenol									
800	2,4,5-Trichlorophenol									
330	2-Chloronaphthalene									
800	2-Nitroaniline									
330	Dimethylphthalate									
330	Acenaphthylene									
330	2,6-Dinitrotoluene									
800	3-Nitroaniline									
330	Acenaphthene									
800	2,4-Dinitrophenol									
800	4-Nitrophenol									
330	Dibenzofuran									
330	2,4-Dinitrotoluene									
330	Diethylphthalate									
330	4-Chlorophenyl-phenylether									
330	Fluorene									
800	4-Nitroaniline									
800	4,6-Dinitro-2-methylphenol									

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 3

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
($\mu\text{g/kg}$)

Job Number: 9301.702 Sampling Date(s): 8-6-93

To calculate sample quantitation limit:
 (CROL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Sample Number:	SD-1	SD-2	SD-3	SD-4	SD-5	W-1
	Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0
	% Moisture:	30	25	24	50	37	15
	Location:						
Compound							
330	N-Nitrosodiphenylamine						
330	4-Bromophenyl-phenylether						
330	Hexachlorobenzene						
800	Pentachlorophenol						
330	Phenanthrene	200 J			74 J	34 J	
330	Anthracene						
330	Carbazole						
330	Di-n-butylphthalate						
330	Fluoranthene	440 J			150 ✓	60 J	
330	Pyrene	370 ✓			110 ✓	59 J	
330	Butylbenzylphthalate						
330	3,3'-Dichlorobenzidine						
330	Benzo(a)anthracene	130 J					
330	Chrysene	240 ✓			86 ✓		
330	bis(2-Ethylhexyl)phthalate						
330	Di-n-octylphthalate						
330	Benzo(b)fluoranthene	230 ✓			150 ✓	110 ✓	
330	Benzo(k)fluoranthene	130 J					
330	Benzo(a)pyrene	180 J					
330	Indeno(1,2,3-cd)pyrene	150 J					
330	Dibenz(a,h)anthracene						
330	Benzo(g,h,i)perylene	140 J					

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 1

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES

Job Number: 9301-702 Sampling Date(s): 8-6-93

(µg/kg)

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((1 - % moisture)/100)

CRQL	Sample Number:	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7						
	Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0						
	% Moisture:	6	26	29	50	26	9	13						
	Location:													
Compound														
330	Phenol		UJ											
330	bis(2-Chloroethyl)ether													
330	2-Chlorophenol													
330	1,3-Dichlorobenzene													
330	1,4-Dichlorobenzene													
330	1,2-Dichlorobenzene													
330	2-Methylphenol													
330	2,2'-oxybis(1-chloropropane)													
330	4-Methylphenol													
330	N-Nitroso-di-n-propylamine													
330	Hexachloroethane													
330	Nitrobenzene													
330	Isophorone													
330	2-Nitrophenol													
330	2,4-Dimethylphenol													
330	bis(2-Chloroethoxy)methane													
330	2,4-Dichlorophenol													
330	1,2,4-Trichlorobenzene													
330	Naphthalene													
330	4-Chloroaniline													

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 2

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES

Job Number: 9301-702 Sampling Date(s): 8-6-93

(µg/kg)

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7				
		Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0				
		% Moisture:	6	26	29	50	26	9	13				
		Location:											
330	Hexachlorobutadiene		4J										
330	4-Chloro-3-methylphenol												
330	2-Methylnaphthalene												
330	Hexachlorocyclopentadiene												
330	2,4,6-Trichlorophenol												
800	2,4,5-Trichlorophenol												
330	2-Chloronaphthalene												
800	2-Nitroaniline												
330	Dimethylphthalate												
330	Acenaphthylene												
330	2,6-Dinitrotoluene												
800	3-Nitroaniline		1										
330	Acenaphthene	50	J										
800	2,4-Dinitrophenol		4J										
800	4-Nitrophenol												
330	Dibenzofuran												
330	2,4-Dinitrotoluene												
330	Diethylphthalate					150	J						
330	4-Chlorophenyl-phenylether												
330	Fluorene												
800	4-Nitroaniline												
800	4,6-Dinitro-2-methylphenol		1										

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 3

Site Name: ERWIN TOWN LANDFILLSOIL SAMPLES
(µg/kg)Job Number: 9301-702 Sampling Date(s): 8-6-93To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7				
		Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0				
		% Moisture:	16	26	29	50	26	9	13				
		Location:											
330	N-Nitrosodiphenylamine		4J										
330	4-Bromophenyl-phenylether		4J										
330	Hexachlorobenzene		4J										
800	Pentachlorophenol		4J										
330	Phenanthrene	330	J	85	J	100	J		140	J			
330	Anthracene	45	J										
330	Carbazole		4J										
330	Di-n-butylphthalate		4J	29	J	25	J	34	J				
330	Fluoranthene	690	J	130	J	140	J		270	J	85	J	
330	Pyrene	720	J	110	J	120	J		310	J			
330	Butylbenzylphthalate		4J										
330	3,3'-Dichlorobenzidine		4J										
330	Benzo(s)anthracene		4J						120	J	48	J	
330	Chrysene	1200	J	83	J	78	J		190	J	60	J	
330	bis(2-Ethylhexyl)phthalate	390	J	940				93	J		38	J	
330	Di-n-octylphthalate		4J										
330	Benzo(b)fluoranthene	620	8J	97	J	96	J		200	J	97	J	
330	Benzo(k)fluoranthene	530	J	35	J	52	J		100	J			
330	Benzo(a)pyrene	380	J	48	J	56	J		150	J	46	J	
330	Indeno(1,2,3-cd)pyrene	580	J						160	J			
330	Dibenz(a,h)anthracene		4J										
330	Benzo(g,h,i)perylene	560	J	55	J				160	J	49	J	

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 1

Site Name: ERWIN TOWN LANDFILLSOIL SAMPLES
(µg/kg)Job Number: 9301.702 Sampling Date(s): 8-6-93To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((1 - % moisture)/100)

CRQL	Compound	Sample Number:		SBLK51		SBLK52		MSB1		SS-2MS		SS-2MSD					
		Dilution Factor:		1.0		1.0		1.0		1.0		1.0					
		% Moisture:								2.6		2.6					
		Location:		METHOD BLANK		METHOD BLANK		MATRIX SPIKE BLANK		MATRIX SPIKE		MATRIX SPIKE DUPLICATE					
330	Phenol							1800		2700			W				
330	bis(2-Chloroethyl)ether																
330	2-Chlorophenol							1700		2400							
330	1,3-Dichlorobenzene																
330	1,4-Dichlorobenzene							1200		1900							
330	1,2-Dichlorobenzene																
330	2-Methylphenol																
330	2,2'-oxybis(1-chloropropane)																
330	4-Methylphenol																
330	N-Nitroso-di-n-propylamine			W				1300		2500							
330	Hexachloroethane																
330	Nitrobenzene			W													
330	Isophorone																
330	2-Nitrophenol																
330	2,4-Dimethylphenol																
330	bis(2-Chloroethoxy)methane																
330	2,4-Dichlorophenol																
330	1,2,4-Trichlorobenzene							1300		2100							
330	Naphthalene																
330	4-Chloroaniline												W				

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: BNAS 2

Site Name: ERWIN TOWN LANDFILLSOIL SAMPLES
(µg/kg)Job Number: 9301-702 Sampling Date(s): 8-6-93To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SBLK51	SBLK52	MEB1	SS-2MS	SS-2MSD								
		Dilution Factor:	1.0	1.0	1.0	1.0	1.0								
		% Moisture:				26	26								
		Location:	METHOD BLANK	METHOD BLANK	MATRIX SPIKE BLANK	MATRIX SPIKE	MATRIX SPIKE DUPLICATE								
330	Hexachlorobutadiene							UV							
330	4-Chloro-3-methylphenol				1900	2700									
330	2-Methylnaphthalene														
330	Hexachlorocyclopentadiene														
330	2,4,6-Trichlorophenol														
800	2,4,5-Trichlorophenol														
330	2-Chloronaphthalene														
800	2-Nitroaniline														
330	Dimethylphthalate														
330	Acenaphthylene														
330	2,6-Dinitrotoluene														
800	3-Nitroaniline														
330	Acenaphthene				1500	2400									
800	2,4-Dinitrophenol														
800	4-Nitrophenol				690	3400									
330	Dibenzofuran														
330	2,4-Dinitrotoluene				970	2100									
330	Diethylphthalate					1300									
330	4-Chlorophenyl-phenylether														
330	Fluorene														
800	4-Nitroaniline														
800	4,6-Dinitro-2-methylphenol							✓							

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A 8 3

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
($\mu\text{g/kg}$)

Job Number: 9301.702 Sampling Date(s): 8-12-93

To calculate sample quantitation limit:
 $(\text{CRQL} \div \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

CRQL	Compound	Sample Number	SBLKS1	SBLKS2	MSBI	SS-2MS	SS-2MSD			
		Dilution Factor	1.0	1.0	1.0	1.0	1.0			
		% Moisture				26	26			
		Location	METHOD BLANK	METHOD BLANK	MATRIX SPIKE BLANK	MATRIX SPIKE	MATRIX SPIKE DUPLICATE			
330	N-Nitrosodiphenylamine									UJ
330	4-Bromophenyl-phenylether									
330	Hexachlorobenzene									
800	Pentachlorophenol			4U	1800	2900				L
330	Phenanthrene					91	J	320	J	
330	Anthracene							45	J	
330	Carbazole									UJ
330	Di-n-butylphthalate							29	J	
330	Fluoranthene			85	J	140	J	430	J	
330	Pyrene		UJ	85	J	2100	3000			UJ
330	Butylbenzylphthalate									UJ
330	3,3'-Dichlorobenzidine									UJ
330	Benzo(a)anthracene							250	BJ	
330	Chrysene			79	J	97	J	360	BJ	
330	bis(2-Ethylhexyl)phthalate					78	J			UJ
330	Di-n-octylphthalate									UJ
330	Benzo(b)fluoranthene			180	J	110	J	470	BJ	
330	Benzo(k)fluoranthene					55	J	180	J	
330	Benzo(a)pyrene					67	J	190	J	
330	Indeno(1,2,3-cd)pyrene							260	J	
330	Dibenz(a,h)anthracene									UJ
330	Benzo(g,h,i)perylene			42	J			180	BJ	

CRQL = Contract Required Quantitation Limit.

To calculate sample quantitation limit:
(CROL ÷ Dilution Factor)

02:Y57900 D4452-TWDS-02/15/94-DI

DATA SUMMARY FORM: BNAS 2

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES

(µg/L)

Job Number: 9301.702 Sampling Date(s): 8-6-93To calculate sample quantitation limit:
(CRQL • Dilution Factor)

CRQL	Compound	Sample Number:	SW-1	SW-2	SW-3	SW-4	SW-5	SW-SRE		
		Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0		
		Location:								
10	Hexachlorobutadiene									
10	4-Chloro-3-methylphenol									
10	2-Methylnaphthalene									
10	Hexachlorocyclopentadiene									
10	2,4,6-Trichlorophenol									
25	2,4,5-Trichlorophenol									
10	2-Chloronaphthalene									
25	2-Nitroaniline									
10	Dimethylphthalate									
10	Acenaphthylene									
10	2,6-Dinitrotoluene									
25	3-Nitroaniline									
10	Acenaphthene									
25	2,4-Dinitrophenol									
25	4-Nitrophenol									
10	Dibenzofuran									
10	2,4-Dinitrotoluene									
10	Diethylphthalate									
10	4-Chlorophenyl-phenylether									
10	Fluorene									
25	4-Nitroaniline									
25	4,6-Dinitro-2-methylphenol									

CRQL = Contract Required Quantitation Limit.

E-32

DATA SUMMARY FORM: B N A S 3

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
($\mu\text{g/L}$)To calculate sample quantitation limit:
(CRQL $\times$ Dilution Factor)Job Number: 9301.702 Sampling Date(s): 8-6-93

CRQL	Compound	Sample Number:	SW-1	SW-2	SW-3	SW-4	SW-5	SW-SRE		
		Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0		
		Location:								
10	N-Nitrosodiphenylamine									
10	4-Bromophenyl-phenylether									
10	Hexachlorobenzene									
25	Pentachlorophenol									
10	Phenanthrene									
10	Anthracene									
10	Carbazole									
10	Di-n-butylphthalate									
10	Fluoranthene									
10	Pyrene		UJ	UJ	UJ	UJ	UJ			
10	Butylbenzylphthalate									
10	3,3'-Dichlorobenzidine									
10	Benzo(a)anthracene									
10	Chrysene									
10	bis(2-Ethylhexyl)phthalate			2 BJ						
10	Di-n-octylphthalate							UJ		
10	Benzo(b)fluoranthene									
10	Benzo(k)fluoranthene									
10	Benzo(a)pyrene									
10	Indeno(1,2,3-cd)pyrene									
10	Dibenz(a,h)anthracene									
10	Benzo(g,h,i)perylene									

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 1

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES

(µg/L)

Job Number: 9301-702 Sampling Date(s): 8-6-93To calculate sample quantitation limit:
(CRQL • Dilution Factor)

CRQL	Compound	Sample Number:	SBLKW1	MSB	SW-2MS	SW-2MSD												
		Dilution Factor:	1.0	1.0	1.0	1.0												
		Location:	METHOD BLANK	MATRIX SPIKE BLANK	MATRIX SPIKE	MATRIX SPIKE DUPLICATE												
10	Phenol			63	53	52												
10	bis(2-Chloroethyl)ether																	
10	2-Chlorophenol			68	58	57												
10	1,3-Dichlorobenzene																	
10	1,4-Dichlorobenzene			45	42	41												
10	1,2-Dichlorobenzene																	
10	2-Methylphenol																	
10	2,2'-oxybis(1-chloropropane)																	
10	4-Methylphenol																	
10	N-Nitroso-di-n-propylamine		UJ	51	63	57												
10	Hexachloroethane																	
10	Nitrobenzene		UJ		UJ													
10	Isophorone																	
10	2-Nitrophenol																	
10	2,4-Dimethylphenol																	
10	bis(2-Chloroethoxy)methane																	
10	2,4-Dichlorophenol																	
10	1,2,4-Trichlorobenzene			47	45	43												
10	Naphthalene																	
10	4-Chloroaniline																	

CRQL = Contract Required Quantitation Limit.

E-34

DATA SUMMARY FORM: B N A S 2

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES

(µg/L)

Job Number: 9301-702 Sampling Date(s): 8-6-93

To calculate sample quantitation limit:

(CRQL * Dilution Factor)

CRQL	Compound	Sample Number:		MSB		SW-2MS		SW-2MSD							
		Dilution Factor:		1.0		1.0		1.0		1.0					
		Location:		METHOD BLANK		MATRIX SPIKE BLANK		MATRIX SPIKE		MATRIX SPIKE DUPLICATE					
10	Hexachlorobutadiene														
10	4-Chloro-3-methylphenol					65		57		55					
10	2-Methylnaphthalene														
10	Hexachlorocyclopentadiene														
10	2,4,6-Trichlorophenol														
25	2,4,5-Trichlorophenol														
10	2-Chloronaphthalene														
25	2-Nitroaniline														
10	Dimethylphthalate														
10	Acenaphthylene														
10	2,6-Dinitrotoluene														
25	3-Nitroaniline														
10	Acenaphthene					52		47		44					
25	2,4-Dinitrophenol														
25	4-Nitrophenol					72		54		53					
10	Dibenzofuran														
10	2,4-Dinitrotoluene					53		47		45					
10	Diethylphthalate														
10	4-Chlorophenyl-phenylether														
10	Fluorene														
25	4-Nitroaniline														
25	4,6-Dinitro-2-methylphenol														

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 3

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
(µg/L)Job Number: 9301.702 Sampling Date(s): 8-6-93To calculate sample quantitation limit:
(CRQL * Dilution Factor)

CRQL	Compound	Sample Number:		MSB		SW-2MS		SW-2MSD							
		Dilution Factor:		1.0		1.0		1.0		1.0					
		Location:													
10	N-Nitrosodiphenylamine														
10	4-Bromophenyl-phenylether														
10	Hexachlorobenzene														
25	Pentachlorophenol			82	E	56		50							
10	Phenanthrene														
10	Anthracene														
10	Carbazole														
10	Di-n-butylphthalate														
10	Fluoranthene														
10	Pyrene		4J	56		44		44							
10	Butylbenzylphthalate														
10	3,3'-Dichlorobenzidine														
10	Benzo(a)anthracene														
10	Chrysene														
10	bis(2-Ethylhexyl)phthalate	13		8	BJ	1	BJ	2	BJ						
10	Di-n-octylphthalate														
10	Benzo(b)fluoranthene														
10	Benzo(k)fluoranthene														
10	Benzo(a)pyrene														
10	Indeno(1,2,3-cd)pyrene														
10	Dibenz(a,h)anthracene														
10	Benzo(g,h,i)perylene														

CRQL = Contract Required Quantitation Limit.

E-36

DATA SUMMARY FORM: PESTICIDES AND PCBs

Site Name: ERWIN TOWN LANDFILLSOIL SAMPLES
(µg/kg)Job Number: 9301.702 Sampling Date(s): 8-6-93To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SD-1	SD-2	SD-3	SD-4	SD-5	WJ-1		
		Dilution Factor:	1.00	1.00	1.00	1.00	1.00	1.00		
		% Moisture:	30	25	24	50	37	15		
		Location:								
1.7	alpha-BHC									
1.7	beta-BHC									
1.7	delta-BHC									
1.7	gamma-BHC (Lindane)									
1.7	Heptachlor									
1.7	Aldrin									
1.7	Heptachlor epoxide									
1.7	Endosulfan I									
3.3	Dieldrin		UJ	UJ	UJ	UJ	UJ	UJ		
3.3	4,4'-DDE									
3.3	Endrin		R	R	R	R	R	R		
3.3	Endosulfan II									
3.3	4,4'-DDD		UJ	UJ	UJ	UJ	UJ	UJ		
3.3	Endosulfan sulfate									
3.3	4,4'-DDT		UJ	UJ	UJ	UJ	UJ	UJ		
17	Methoxychlor		UJ	UJ	UJ	UJ	UJ	UJ		
3.3	Endrin ketone									
3.3	Endrin aldehyde									
1.7	alpha-Chlordane									
1.7	gamma-Chlordane									
170	Toxaphene									

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS (Cont.)

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
($\mu\text{g/kg}$)

Job Number: 9301.702 Sampling Date(s): 8-6-93

To calculate sample quantitation limit:
 $(\text{CRQL} \div \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: ERWIN TOWN LANDFILLSOIL SAMPLES
(µg/kg)Job Number: 9301.702 Sampling Date(s): 8-6-93To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7				
		Dilution Factor:	10.0	1.0	1.0	1.0	1.0	1.0	1.0				
		% Moisture:	6	26	29	13	26	9	13				
		Location:											
1.7	alpha-BHC		UJ										
1.7	beta-BHC												
1.7	delta-BHC												
1.7	gamma-BHC (Lindane)												
1.7	Heptachlor												
1.7	Aldrin												
1.7	Heptachlor epoxide												
1.7	Endosulfan I												
3.3	Dieldrin			UJ	UJ	UJ	UJ	UJ	UJ				
3.3	4,4'-DDE		I					160					
3.3	Endrin		R	R	R	R	R	R	R				
3.3	Endosulfan II		UJ										
3.3	4,4'-DDD			UJ	UJ	UJ	UJ	UJ	UJ				
3.3	Endosulfan sulfate												
3.3	4,4'-DDT			UJ	UJ	UJ	UJ	260	J			UJ	
17	Methoxychlor			UJ	UJ	UJ	UJ	UJ	UJ			UJ	
3.3	Endrin ketone												
3.3	Endrin aldehyde												
1.7	alpha-Chlordane												
1.7	gamma-Chlordane												
170	Toxaphene		I										

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS (Cont.)

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
($\mu\text{g/kg}$)

Job Number: 9301.702 Sampling Date(s): 8-6-93

To calculate sample quantitation limit:
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: ERWIN LANDFILL

SOIL SAMPLES

Job Number: 9301-702 Sampling Date(s): 8-12-93

(µg/kg)

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	PBLK51	PBLK52	PBLK53	PBLK54	MSB2	SS-2MS	SS-2MSD					
		Dilution Factor:	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
		% Moisture:						26	26					
		Location:	METHOD BLANK	METHOD BLANK	METHOD BLANK	METHOD BLANK	MATRIX SPIKE BLANK	MATRIX SPIKE	MATRIX SPIKE DUPLICATE					
1.7	alpha-BHC													
1.7	beta-BHC													
1.7	delta-BHC													
1.7	gamma-BHC (Lindane)						15	22	18					
1.7	Heptachlor						16	20	19					
1.7	Aldrin						15	20	17	J				
1.7	Heptachlor epoxide													
1.7	Endosulfan I													
3.3	Dieldrin						34	52	J	47	J			
3.3	4,4'-DDE													
3.3	Endrin		R	R	R	R	35	J	48	J	46	J		
3.3	Endosulfan II													
3.3	4,4'-DDD		UN	UN	UN	UN	UN	UN	UN	UN	UN			
3.3	Endosulfan sulfate													
3.3	4,4'-DDT						33	46	J	43	J			
17	Methoxychlor		UN	UN	UN	UN	UN	UN	UN	UN	UN			
3.3	Endrin ketone													
3.3	Endrin aldehyde													
1.7	alpha-Chlordane													
1.7	gamma-Chlordane													
170	Toxaphene													

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS (Cont.)

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
($\mu\text{g/kg}$)

Job Number: 9301.702 Sampling Date(s): 8-6-93

To calculate sample quantitation limit:
 $(\text{CRQL} \div \text{Dilution Factor}) \div ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
(µg/L)To calculate sample quantitation limit:
(CRQL * Dilution Factor)Job Number: 9301-702 Sampling Date(s): 8-6-93

CRQL	Compound	Sample Number:	SW-1	SW-2	SW-3	SW-4	SW-5			
		Dilution Factor:	1.00	1.00	1.00	1.00	1.00			
		Location:								
0.05	alpha-BHC							UJ		
0.05	beta-BHC									
0.05	delta-BHC									
0.05	gamma-BHC (Lindane)									
0.05	Heptachlor									
0.05	Aldrin									
0.05	Heptachlor epoxide									
0.05	Endosulfan I									
0.10	Dieldrin									
0.10	4,4'-DDE									
0.10	Endrin									
0.10	Endosulfan II									
0.10	4,4'-DDD		UJ	UJ	UJ	UJ				
0.10	Endosulfan sulfate									
0.10	4,4'-DDT									
0.50	Methoxychlor		UJ	UJ	UJ	UJ				
0.10	Endrin ketone									
0.10	Endrin aldehyde									
0.05	alpha-Chlordane									
0.05	gamma-Chlordane									
5.0	Toxaphene									

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBs (Cont.)

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES
($\mu\text{g/L}$)

Job Number: 9301-702 Sampling Date(s): 8-6-93

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
($\mu\text{g/L}$)To calculate sample quantitation limit:
(CRQL $\times$ Dilution Factor)Job Number: 9301-702 Sampling Date(s): 8-6-93

CRQL	Compound	Sample Number:	PBLKSU	PBLKW1	MSB1	SW-2MS	SW-2MSD										
		Dilution Factor:	1.00	1.00	1.00	1.00	1.00										
		Location:	METHOD BLANK	METHOD BLANK	MATRIX SPIKE BLANK	MATRIX SPIKE	MATRIX SPIKE DUPLICATE										
0.05	alpha-BHC																
0.05	beta-BHC																
0.05	delta-BHC																
0.05	gamma-BHC (Lindane)				0.42	0.51	0.55										
0.05	Heptachlor				0.35	0.46	0.52										
0.05	Aldrin				0.37	0.41	0.48										
0.05	Heptachlor epoxide																
0.05	Endosulfan I																
0.10	Dieldrin				0.87	1.2	1.2										
0.10	4,4'-DDE																
0.10	Endrin				0.91	1.1	1.2										
0.10	Endosulfan II																
0.10	4,4'-DDD		UJ	UJ	UJ	UJ	UJ										
0.10	Endosulfan sulfate																
0.10	4,4'-DDT				0.85	1.1	1.1										
0.50	Methoxychlor		UJ	UJ	UJ	UJ	UJ										
0.10	Endrin ketone																
0.10	Endrin aldehyde																
0.05	alpha-Chlordane																
0.05	gamma-Chlordane																
5.0	Toxaphene																

CRQL = Contract Required Quantitation Limit.

SOIL SAMPLES

Job Number: 9301.702 Sampling Date(s): 8-12-93

To calculate sample quantitation limit:
 $(CRQL \cdot \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

02:Y57900 D4452-TSDS-02/15/94-D1

DATA SUMMARY FORM: TCLP VOLATILES

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
(MG/L)

Job Number: 9301.702 Sampling Date(s): 8-6-93

To calculate sample quantitation limit:
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Sample Number:	W1-1	METHOD BUK						
	Dilution Factor:								
	% Moisture:								
	Location:								
	Compound								

[illegible]

02:Y57900 D4452-TSDG-02/15/94-DI

DATA SUMMARY FORM: INORGANICS

Site Name: ERWIN TOWN LANDFILLSOIL SAMPLES
(mg/kg)Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.Job Number: 9301.702 Sampling Date(s): 8-6-93

CRQL	Compound	Sample Number:	SD-1	SD-2	SD-3	SD-4	SD-5	SS-1	SS-2	SS-3
		Dilution Factor:								
		% Solids:	69.8	74.9	76.4	50.5	62.6	94.0	74.4	70.8
		Location:								
40	Aluminum		7260	11500	7950	10,300	2930	9510	6950	4160
12	Antimony									
2	Arsenic		3.5	5.3	3.4	7.1	26.9	6.4	26.0	13.0
40	Barium		115	187	105	179	168	163	204	150
1	Beryllium		0.42 J	0.67 J	0.42 J	0.66 J		0.51 J	0.45 J	0.55 J
1	Cadmium		1.1 J	1.3 J	1.1 J	1.3 J	1.9	2.1	4.5	1.2 J
1000	Calcium		15,300	3350	3940	4920	32,900	7990	3380	3110
2	Chromium		12.0	18.0	12.8	17.2	8.0	31.4	12.8	7.6
10	Cobalt		10.9 J	14.9	11.1 J	13.7 J	7.1 J	17.3	10.1 J	7.9 J
5	Copper		42.2	28.0	25.4	36.3	27.1	94.2	49.9	19.7
20	Iron		17000	24,900	18,700	24,500	16,700	38,000	14,700	12,500
0.6	Lead		35.0	28.2	15.5	27.8	109	3210	572	30.1
1000	Magnesium		3540	3430	2970	4170	2950	5810	2270	1620
3	Manganese		440	764	346	698	1360	529	589	287
0.2	Mercury									
8	Nickel		19.5	25.9	19.9	27.4	13.9	41.1	28.6	12.8
1000	Potassium		600 J	1000 J	694 J	747 J	1440 J	833 J	1240 J	868 J
1	Selenium		0.29 UJ	0.27 UJ	0.26 UJ	0.40 UJ	0.32 UJ	0.69 J	0.49 J	0.32 J
2	Silver					1.2				
1000	Sodium		135 J	119 J		161 J	3810	83.0 J	384 J	862 J
2	Thallium									
10	Vanadium		12.1 J	17.9	13.2	17.0 J	9.5 J	16.5	10.1 J	14.0 J
4	Zinc		121	81.3	70.5	111	206	335	164	48.8
2	Cyanide		0.72 UJ	0.67 UJ	0.65 UJ	0.99 UJ	0.80 UJ	1.1 J	0.67 UJ	0.71 UJ

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: INORGANICS

Site Name: ERWIN TOWN LANDFILLSOIL SAMPLES
(mg/kg)Job Number: 9301.702 Sampling Date(s): 8-6-93Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.

CRQL	Compound	Sample Number:	SS-4	SS-5	SS-6	SS-7	W-1	SS-2S	SS-2D				
		Dilution Factor:											
		% Solids:	87.5	73.4	91.0	86.8	85.2	74.4	74.4				
		Location:						MATRIX SPIKE	DUPLICATE				
40	Aluminum		7020	1960	3690	4520	251		7000				
12	Antimony							110					
2	Arsenic		5.9	4.5	14.3	5.4	4.1	37	25				
40	Barium		199	67.2	172	82.1	25.9 J	820	200				
1	Beryllium		0.68 J		0.41 J	0.43 J		15	0.5				
1	Cadmium		0.87 J		1.4	0.93 J		18	4.1				
1000	Calcium		1890	2250	3310	2400	3340		3400				
2	Chromium		11.0	3.4	8.3	8.3		73	13.0				
10	Cobalt		11.2 J	3.2 J	7.0 J	8.5 J		150	9.4				
5	Copper		17.3	7.2	46.0	14.2	3.6 J	110	42				
20	Iron		14,600	5220	11,200	12100	1490		15,000				
0.6	Lead		27.4	26.1	201	20.0	40.4	750	510				
1000	Magnesium		1900	465 J	793 J	1790	294 J		2400				
3	Manganese		768	215	422	537	174	770	570				
0.2	Mercury				0.25			0.7					
8	Nickel		16.8	3.5 J	8.4 J	14.1		170	2.7				
1000	Potassium		1090 J	442 J	567 J	541 J	224 J		1300				
1	Selenium		0.23 UJ	0.27 UJ	0.59 J	0.23 UJ	0.23 UJ	2.4					
2	Silver							15					
1000	Sodium			6860 J	151 J	80.9 J	190 J		390				
2	Thallium							12					
10	Vanadium		11.2 J	4.8 J	10.0 J	8.0 J		147	10.0				
4	Zinc		46.5	23.3	144	48.7	17.3	295	150				
2	Cyanide		0.57 UJ	0.68 UJ	0.55 UJ	0.58 UJ	0.59 UJ	2.2					

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: INORGANICS

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
($\mu\text{g/L}$)Job Number: 9301-702 Sampling Date(s): 8-12-93Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.

CRQL	Compound	Sample Number:		SW-1		SW-2		SW-3		SW-4		SW-5		SW-2.5		SW-20	
		Dilution Factor:															
		Location:												MATRIX SPIKE		DUPLICATE	
200	Aluminum			19.6	B	61.5	B	74.1	B	27.8	B	111	B	2200		53	
60	Antimony									43.8	J	199	J	510			
10	Arsenic											323	J	38			
200	Barium			119	J	124	J	124	J	123	J	489	J	2100		120	
5	Beryllium												UJ	54			
5	Cadmium												UJ	52			
5000	Calcium			74900		77200		76300		76200		75800	J			75000	
10	Chromium												4J	200			
50	Cobalt											7.9	J	490			
25	Copper			5.4	J	7.2	J	5.3	J	5.7	J	15.0	J	250		7.0	
100	Iron			41.3	J	61.5	J	38.9	J	18.3	J	6210	J	1200		55	
3	Lead											23.8	J	20			
5000	Magnesium			18,500		19200		18,900		18,800		89,800	J			18,500	
15	Manganese					2.2	J	1.8	J	2.6	J	376	J	510		2.2	
0.2	Mercury												4J	1.2			
40	Nickel											35.4	J	500			
5000	Potassium			2,150	J	2300	J	2060	J	2150	J	413,000	J			2200	
5	Selenium			1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ		4J	7.4		2.1	
10	Silver												4J	56			
5000	Sodium			27,100	J	27700	J	27,400	J	27300	J	1,950,000	J			27,000	
10	Thallium											10.5	J	47			
50	Vanadium											5.3	J	480			
20	Zinc					4.3	J			3.6	J	34.2	J	520		4.0	
10	Cyanide													90			

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: VOLATILES 1

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES
($\mu\text{g/L}$)

Job Number: $9302 \cdot \frac{255}{\frac{263}{315}}$ Sampling Date(s): 10/4 - 6/93

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 1

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES
($\mu\text{g/L}$)

Job Number: 9302. $\frac{255}{263}$ $\frac{315}{315}$ Sampling Date(s): 10/4-6/93

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

[illegible]

DATA SUMMARY FORM: B N A S 2

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES

(µg/L)

To calculate sample quantitation limit:
(CRQL * Dilution Factor)Job Number: 9302-315 Sampling Date(s): 10/4-6/93

CRQL	Compound	Sample Number:	DW-1	SBCKW1															
		Dilution Factor:	1.0	1.0															
		Location:	DRILL WATER	METHOD BLANK															
10	Hexachlorobutadiene		U																
10	4-Chloro-3-methylphenol																		
10	2-Methylnaphthalene																		
10	Hexachlorocyclopentadiene																		
10	2,4,6-Trichlorophenol																		
25	2,4,5-Trichlorophenol																		
10	2-Chloronaphthalene																		
25	2-Nitroaniline																		
10	Dimethylphthalate																		
10	Acenaphthylene																		
10	2,6-Dinitrotoluene																		
25	3-Nitroaniline																		
10	Acenaphthene																		
25	2,4-Dinitrophenol																		
25	4-Nitrophenol																		
10	Dibenzofuran																		
10	2,4-Dinitrotoluene																		
10	Diethylphthalate																		
10	4-Chlorophenyl-phenylether			U															
10	Fluorene																		
25	4-Nitroaniline																		
25	4,6-Dinitro-2-methylphenol		V																

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 3

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
(ug/L)Job Number: 9302 ²⁵³₂₀₃ ²¹⁵
Sampling Date(s): 10/4-6/93To calculate sample quantitation limit:
(CRQL * Dilution Factor)

CRQL	Compound	Sample Number:	DW-1	SBKWI															
		Dilution Factor:	1.0	1.0															
		Location:	DRINK WATER	METHOD BLANK															
10	N-Nitrosodiphenylamine		UJ																
10	4-Bromophenyl-phenylether																		
10	Hexachlorobenzene																		
25	Pentachlorophenol																		
10	Phenanthrene																		
10	Anthracene																		
10	Carbazole																		
10	Di-n-butylphthalate																		
10	Fluoranthene																		
10	Pyrene																		
10	Butylbenzylphthalate																		
10	3,3'-Dichlorobenzidine			UJ															
10	Benzo(a)anthracene																		
10	Chrysene																		
10	bis(2-Ethylhexyl)phthalate																		
10	Di-n-octylphthalate																		
10	Benzo(b)fluoranthene																		
10	Benzo(k)fluoranthene																		
10	Benzo(a)pyrene																		
10	Indeno(1,2,3-cd)pyrene																		
10	Dibenz(a,h)anthracene																		
10	Benzo(g,h,i)perylene																		

CRQL = Corrected Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
(µg/L)Job Number: 9202-315 Sampling Date(s): 10/4-16/93To calculate sample quantitation limit:
(CRQL ÷ Dilution Factor)

CRQL	Compound	Sample Number:	DW-1	PBLKW1															
		Dilution Factor:	1.0	1.0															
		Location:	DRILL WATER	METHOD BLANK															
0.05	alpha-BHC		UJ																
0.05	beta-BHC																		
0.05	delta-BHC																		
0.05	gamma-BHC (Lindane)																		
0.05	Heptachlor			UJ															
0.05	Aldrin																		
0.05	Heptachlor epoxide																		
0.05	Endosulfan I																		
0.10	Dieldrin			UJ															
0.10	4,4'-DDE																		
0.10	Endrin			UJ															
0.10	Endosulfan II																		
0.10	4,4'-DDD			UJ															
0.10	Endosulfan sulfate																		
0.10	4,4'-DDT																		
0.50	Methoxychlor			UJ															
0.10	Endrin ketone			UJ															
0.10	Endrin aldehyde																		
0.05	alpha-Chlordane																		
0.05	gamma-Chlordane																		
5.0	Toxaphene																		

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS (Cont.)

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES
($\mu\text{g/L}$)

Job Number: 9302 ²⁵⁵₂₄₃₃₁₅ Sampling Date(s): 10/4-6/93

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

[illegible]

E-60

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: INORGANICS

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES

Job Number: 7302 ²⁵⁵₂₄₃³¹⁵ Sampling Date(s): 10/4-6/93

(µg/L)

Due to dilution, sample quantitation limit is affected.

See dilution table for specifics.

CRQL	Compound	Sample Number:	Dilution Factor:	Location:														
		DW-1	1.0	DRILL WATER														
200	Aluminum	126	J															
60	Antimony																	
10	Arsenic																	
200	Barium	105	J															
5	Beryllium																	
5	Cadmium																	
5000	Calcium	77,300																
10	Chromium																	
50	Cobalt																	
25	Copper																	
100	Iron	198																
3	Lead																	
5000	Magnesium	14100																
15	Manganese	26.2																
0.2	Mercury																	
40	Nickel																	
5000	Potassium	2470	J															
5	Selenium																	
10	Silver																	
5000	Sodium	20,200																
10	Thallium																	
50	Vanadium																	
20	Zinc	55.1																
10	Cyanide																	

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: EPToxicity Metals

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES

Job Number: 9302.255 Sampling Date(s): 10-4-93

 $(\mu\text{g/L})$

To calculate sample quantitation limit:
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

To calculate sample quantitation limit:
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

02:YS7900 D4452-TSD5-02/15/94-D1

Site Name: ERWIN TOWN LANDFILL

Job Number: 9302. ²⁵⁵₂₄₃³¹⁵ Sampling Date(s): 10/4-6/93

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

[illegible]

02:Y57900 D4452-TSDS-02/15/94-D1

DATA SUMMARY FORM: VOLATILES 2

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES

Job Number: 9302 ²⁵⁵ ₂₆₃ ₃₁₅ Sampling Date(s): 10/4-6/93

(μg/kg)

To calculate sample quantitation limit:
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

E-66

DATA SUMMARY FORM: B N A S 1

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES

Job Number: 9302 ²⁵⁵₃₁₅ Sampling Date(s): 10/4-6/93

(µg/kg)

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((1 - % moisture)/100)

CRQL	Compound	Sample Number:	MW-1	MW-2	MW-3	MW-4A	MW-5A	MW-6	SBKLS1	SBKLS2
		Dilution Factor:	1.0	1.0	5.0	1.0	1.0	1.0	1.0	1.0
		% Moisture:	13	25	14	15	24	33		
		Location:							METHOD BLANK	METHOD BLANK
330	Phenol							R		
330	bis(2-Chloroethyl)ether									
330	2-Chlorophenol									
330	1,3-Dichlorobenzene									
330	1,4-Dichlorobenzene									
330	1,2-Dichlorobenzene									
330	2-Methylphenol									
330	2,2'-oxybis(1-chloropropane)									
330	4-Methylphenol									
330	N-Nitroso-di-n-propylamine									
330	Hexachloroethane									
330	Nitrobenzene									
330	Isophorone									
330	2-Nitrophenol									
330	2,4-Dimethylphenol									
330	bis(2-Chloroethoxy)methane									
330	2,4-Dichlorophenol									
330	1,2,4-Trichlorobenzene									
330	Naphthalene			127	J					
330	4-Chloroaniline							✓		

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 2

Site Name: ERWIN TOWN LANDFILLSOIL SAMPLES
($\mu\text{g/kg}$)Job Number: 9302 ²⁵⁵₂₄₃³¹⁵ Sampling Date(s): _____To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	MW-1	MW-2	MW-3	MW-4A	MW-5A	MW-6	SBKLS1	SBKLS2
		Dilution Factor:	1.0	1.0	5.0	1.0	1.0	1.0	1.0	1.0
		% Moisture:	13	25	14	15	24	33		
		Location:							METHOD BLANK	METHOD BLANK
330	Hexachlorobutadiene							R		
330	4-Chloro-3-methylphenol									
330	2-Methylnaphthalene			1400	41	J				
330	Hexachlorocyclopentadiene									
330	2,4,6-Trichlorophenol									
800	2,4,5-Trichlorophenol									
330	2-Chloronaphthalene									
800	2-Nitroaniline									
330	Dimethylphthalate									
330	Acenaphthylene									
330	2,6-Dinitrotoluene									
800	3-Nitroaniline									
330	Acenaphthene									
800	2,4-Dinitrophenol									
800	4-Nitrophenol									
330	Dibenzofuran			53	J					
330	2,4-Dinitrotoluene									
330	Diethylphthalate									230 J
330	4-Chlorophenyl-phenylether									
330	Fluorene			190	J					
800	4-Nitroaniline									
800	4,6-Dinitro-2-methylphenol							V		

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: B N A S 3

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES

Job Number: 9302-²⁵⁵₂₆₃ Sampling Date(s): 10/4-6/93

(µg/kg)

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	MW-1	MW-2	MW-3	MW-4A	MW-5A	MW-6	SBLKS1	SBLKS2
		Dilution Factor:	1.0	1.0	5.0	1.0	1.0	1.0	1.0	1.0
		% Moisture:	13	25	14	15	24	33		
		Location:							METHOD BLANK	METHOD BLANK
330	N-Nitrosodiphenylamine							R		
330	4-Bromophenyl-phenylether									
330	Hexachlorobenzene									
800	Pentachlorophenol									
330	Phenanthrene			640	120 J					
330	Anthracene									
330	Carbazole									
330	Di-n-butylphthalate			53 J	380 J	53 J				
330	Fluoranthene		4J	120 J	120 J			4J		
330	Pyrene			230 J	160 J					
330	Butylbenzylphthalate			240 J	3800 J					
330	3,3'-Dichlorobenzidine									
330	Benzo(a)anthracene			210 J	130 J					
330	Chrysene			280 J	180 J					
330	bis(2-Ethylhexyl)phthalate		44 BJ	160 JB	370 J	190 JB				23 J
330	Di-n-octylphthalate				35 J					
330	Benzo(b)fluoranthene			320 J	160 J					
330	Benzo(k)fluoranthene			63 J	48 J					
330	Benzo(a)pyrene			230 J	120 J					
330	Indeno(1,2,3-cd)pyrene			150 J	63 J					
330	Dibenz(a,h)anthracene			61 J						
330	Benzo(g,h,i)perylene			160 J	92 J					

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 1

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
($\mu\text{g/kg}$)

Job Number: 9302 $\begin{matrix} 255 \\ 243 \\ \hline 315 \end{matrix}$ Sampling Date(s): 10/4-6/93

To calculate sample quantitation limit:
 $(\text{CRQL} \times \text{Dilution Factor}) / ((1 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 2

Site Name: ERWIN TOWN LANDFILLSOIL SAMPLES
(µg/kg)Job Number: 9302 ²⁵⁵₂₆₃ ³¹⁵ Sampling Date(s): 10/4-6/93To calculate sample quantitation limit:
(CRQL • Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SBLK53	MSA	MW-SAMS	MW-SAMSD												
		Dilution Factor:	1.0	1.0	1.0	1.0												
		% Moisture:			24	24												
		Location:	METHOD BLANK	MATRIX SPIKE BLANK	MATRIX SPIKE	MATRIX SPIKE DUPLICATE												
330	Hexachlorobutadiene																	
330	4-Chloro-3-methylphenol			1700	2300	2100												
330	2-Methylnaphthalene																	
330	Hexachlorocyclopentadiene																	
330	2,4,6-Trichlorophenol																	
800	2,4,5-Trichlorophenol																	
330	2-Chloronaphthalene																	
800	2-Nitroaniline																	
330	Dimethylphthalate																	
330	Acenaphthylene																	
330	2,6-Dinitrotoluene																	
800	3-Nitroaniline																	
330	Acenaphthene			1300	1700	1600												
800	2,4-Dinitrophenol																	
800	4-Nitrophenol			1700	4100	E	4000	E										
330	Dibenzofuran																	
330	2,4-Dinitrotoluene			1300	1600	1600												
330	Diethylphthalate					260	JB											
330	4-Chlorophenyl-phenylether																	
330	Fluorene																	
800	4-Nitroaniline																	
800	4,6-Dinitro-2-methylphenol																	

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 3

 Site Name: ERWIN TOWN LANDFILL
 Job Number: 9302. 315 Sampling Date(s): 10/4-6/93

 SOIL SAMPLES
 (µg/kg)

 To calculate sample quantitation limit:
 (CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SBUK53	MSB	MW-5AUS	MW-5AMSD												
		Dilution Factor:	1.0	1.0	1.0	1.0												
		% Moisture:			24	24												
		Location:	METHOD BLANK	MATRIX SPIKE BLANK	MATRIX SPIKE	MATRIX SPIKE DUPLICATE												
330	N-Nitrosodiphenylamine																	
330	4-Bromophenyl-phenylether																	
330	Hexachlorobenzene																	
800	Pentachlorophenol			2400	3500 E	2500												
330	Phenanthrene																	
330	Anthracene																	
330	Carbazole																	
330	Di-n-butylphthalate				60 J	50 J												
330	Fluoranthene																	
330	Pyrene			1400	2100	2200												
330	Butylbenzylphthalate																	
330	3,3'-Dichlorobenzidine																	
330	Benzo(a)anthracene																	
330	Chrysene				410 J													
330	bia(2-Ethylhexyl)phthalate				150 JB	100 JB												
330	Di-n-octylphthalate																	
330	Benzo(b)fluoranthene																	
330	Benzo(k)fluoranthene																	
330	Benzo(a)pyrene																	
330	Indeno(1,2,3-cd)pyrene																	
330	Dibenz(a,h)anthracene																	
330	Benzo(g,h,i)perylene																	

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES

Job Number: 9302 ²⁵³₂₁₆₃³¹⁵ Sampling Date(s): 10/4-6/93

(µg/kg)

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	MW-1	MW-2	MW-3	MW-4A	MW-5A	MW-6	PBLKS1	PBLKS2
		Dilution Factor:	10.0	1.0	1.0	1.0	1.0	10.0	1.0	1.0
		% Moisture:	13	25	14	15	24	33		
		Location:							METHOD BLANK	METHOD BLANK
1.7	alpha-BHC									
1.7	beta-BHC									
1.7	delta-BHC									
1.7	gamma-BHC (Lindane)									
1.7	Heptachlor			UJ	UJ	UJ	UJ		UJ	
1.7	Aldrin									
1.7	Heptachlor epoxide									
1.7	Endosulfan I									
3.3	Dieldrin		UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
3.3	4,4'-DDE									
3.3	Endrin		UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
3.3	Endosulfan II									
3.3	4,4'-DDD		UJ	UJ	46 J	UJ	UJ	UJ	UJ	UJ
3.3	Endosulfan sulfate									
3.3	4,4'-DDT	140			53			190		8.0
17	Methoxychlor		UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
3.3	Endrin ketone		UJ	UJ	UJ	UJ		UJ	UJ	UJ
3.3	Endrin aldehyde									
1.7	alpha-Chlordane									
1.7	gamma-Chlordane									
170	Toxaphene									

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS (Cont.)

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
($\mu\text{g/kg}$)

Job Number: 9302²³⁰₂₁₀₃₃₁₅ Sampling Date(s): 10/4-6/93

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES

Job Number: 9302 ²⁵⁵₂₁₀₃ ^{315 Sampling Date(s): 10/4-6/93}

(ug/kg)

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	PBLK53	MW-5AMS	MW-5AMSD	MSB												
		Dilution Factor:	1.0	1.0	1.0	1.0												
		% Moisture:		24	24													
		Location:	METHOD BLACK	MATRIX SPIKE	MATRIX SPIKE DUPLICATE	MATRIX SPIKE BLANK												
1.7	alpha-BHC																	
1.7	beta-BHC																	
1.7	delta-BHC																	
1.7	gamma-BHC (Lindane)			13	13 J	11												
1.7	Heptachlor			16 J	16 J	12 J												
1.7	Aldrin			13	13	10												
1.7	Heptachlor epoxide																	
1.7	Endosulfan I																	
3.3	Dieldrin		UJ	27 J	28 J	23 J												
3.3	4,4'-DDE																	
3.3	Endrin		UJ	38 J	39 J	26 J												
3.3	Endosulfan II																	
3.3	4,4'-DDD		UJ	UJ	UJ	UJ												
3.3	Endosulfan sulfate																	
3.3	4,4'-DDT		9.5	36	36	24												
17	Methoxychlor		UJ	UJ	UJ	UJ												
3.3	Endrin ketone		UJ	UJ	UJ	UJ												
3.3	Endrin aldehyde																	
1.7	alpha-Chlordane																	
1.7	gamma-Chlordane																	
170	Toxaphene																	

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS (Cont.)

Site Name: ERWIN TOWN LANDFILL

SOIL SAMPLES
($\mu\text{g/kg}$)

Job Number: 9302. ²²³₂₆₃
215 Sampling Date(s): 10/4-6/93

To calculate sample quantitation limit:
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract R- Quantitation Limit.

DATA SUMMARY FORM: INORGANICS

Site Name: ERWIN TOWN LANDFILLSOIL SAMPLES
(mg/kg)Job Number: 9302 ²⁵³₃₁₅ Sampling Date(s): 10/4-6/93Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.

CRQL	Compound	Sample Number:		MW-1	MW-2	MW-3	MW-4A	MW-5A	MW-6	MW-5AS	MW-5AD
		Dilution Factor:									
		% Solids:		87.4	74.4	86.4	85.2	75.9	66.9	75.9	75.9
		Location:								MATRIX SPIKE	MATRIX SPIKE DUPLICATE
40	Aluminum			5170	6120	5490	6330	7630	6940		9800
12	Antimony		UJ		UJ	308	J	UJ	UJ	89	
2	Arsenic			4.2	5.0	5.6	5.0	9.3	15.4	20	9.9
40	Barium			147	72.1	67.7	80.9	107	158	660	120
1	Beryllium		J	0.20	J	0.25	J	0.30	J	0.39	J
1	Cadmium			1.5	1.8	1.7	1.6	1.4	1.5	14	1.9
1000	Calcium		J	36100	J	18400	J	48100	J	2350	J
2	Chromium			11.2	25.8	37.1	17.6	15.0	11.3	70	19
10	Cobalt		J	8.1	J	9.3	J	8.3	J	9.7	J
5	Copper			24.9	58.6	29.4	20.7	30.4	20.5	110	37
20	Iron			13,800	18,300	15,000	15,000	16,400	17,800		21,000
0.6	Lead			14.2	28.3	82.3	15.2	34.1	13.9	42	43
1000	Magnesium			10,000	5350	1950	12,100	5250	2590		5200
3	Manganese		J	1280	J	461	J	291	J	971	J
0.2	Mercury				0.16					0.77	
8	Nickel			15.6	20.7	23.9	16.1	20.0	20.1	140	24
1000	Potassium		B	641	B	1080	B	852	B	1120	B
1	Selenium										3.6
2	Silver									12	
1000	Sodium				349	J	213	J	372	J	308
2	Thallium										
10	Vanadium		J	8.9	J	10.9	J	10.2	J	11.9	J
4	Zinc			64.2	163	70.9	72.0	78.6		13.9	J
2	Cyanide									140	20
										220	95
										32	

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: VOLATILES 1

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES
($\mu\text{g/L}$)

Job Number: 9302.596 Sampling Date(s): 11/4-5/93

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

[illegible]

CRQL = Contract Required Quantitation Limit.

To calculate sample quantitation limit:
(CRQL ÷ Dilution Factor)

02:Y57900_D4452-TWDS-02/15/94-DI

DATA SUMMARY FORM: VOLATILES 1

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES
($\mu\text{g/L}$)

Job Number: 9302.596 Sampling Date(s): 11/4-5/93

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

[illegible]

CRQL = Contract Required Quantitation Limit.

To calculate sample quantitation limit:
(CRQL ÷ Dilution Factor)

02:YS7900 D4452-TWDS-02/15/94-D1

DATA SUMMARY FORM: B N A S 1

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES
($\mu\text{g/L}$)

Job Number: 9302.594 Sampling Date(s): 11/4-5/93

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 2

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
(µg/L)To calculate sample quantitation limit:
(CRQL * Dilution Factor)Job Number: 9302-S916 Sampling Date(s): 11/4-5/93

CRQL	Compound	Sample Number:	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	SALKW1
		Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		Location:								METHOD BLANK
10	Hexachlorobutadiene						UJ	UJ	UJ	
10	4-Chloro-3-methylphenol									
10	2-Methylnaphthalene						UJ	UJ	UJ	
10	Hexachlorocyclopentadiene						UJ	UJ	UJ	
10	2,4,6-Trichlorophenol									
25	2,4,5-Trichlorophenol									
10	2-Chloronaphthalene						UJ	UJ	UJ	
25	2-Nitroaniline									
10	Dimethylphthalate									
10	Acenaphthylene									
10	2,6-Dinitrotoluene									
25	3-Nitroaniline									
10	Acenaphthene									
25	2,4-Dinitrophenol									
25	4-Nitrophenol									
10	Dibenzofuran						UJ	UJ	UJ	
10	2,4-Dinitrotoluene									
10	Diethylphthalate									
10	4-Chlorophenyl-phenylether									
10	Fluorene									
25	4-Nitroaniline									
25	4,6-Dinitro-2-methylphenol									

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 3

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
(ug/L)Job Number: 9302-596 Sampling Date(s): 11/4-5/93To calculate sample quantitation limit:
(CRQL * Dilution Factor)

CRQL	Sample Number: Dilution Factor: Location: Compound	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	SBLK W1
		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
									METHOD BLANK
10	N-Nitrosodiphenylamine					UJ	UJ	UJ	
10	4-Bromophenyl-phenylether					I	I	I	
10	Hexachlorobenzene					I	I	I	
25	Pentachlorophenol								
10	Phenanthrene					UJ	UJ	UJ	
10	Anthracene								
10	Carbazole								
10	Di-n-butylphthalate								
10	Fluoranthene								
10	Pyrene								
10	Butylbenzylphthalate			1 J					
10	3,3'-Dichlorobenzidine								
10	Benzo(a)anthracene								
10	Chrysene							I	
10	bis(2-Ethylhexyl)phthalate			2 J				2 J	
10	Di-n-octylphthalate							UJ	
10	Benzo(b)fluoranthene								
10	Benzo(k)fluoranthene								
10	Benzo(a)pyrene								
10	Indeno(1,2,3-cd)pyrene								
10	Dibenz(a,h)anthracene					I	I	I	
10	Benzo(g,h,i)perylene								

CRQL = Contract Required Quantitation Limit.

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 2

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
($\mu\text{g/L}$)Job Number: 9302-596 Sampling Date(s): 11/4-5/93To calculate sample quantitation limit:
(CRQL $\times$ Dilution Factor)

CRQL	Compound	Sample Number:	MSB	MW-2 MS														
		Dilution Factor:	1.0	1.0														
		Location:	MATRIX SPIKE BLANK	MATRIX SPIKE														
10	Hexachlorobutadiene																	
10	4-Chloro-3-methylphenol		40	52														
10	2-Methylnaphthalene																	
10	Hexachlorocyclopentadiene																	
10	2,4,6-Trichlorophenol																	
25	2,4,5-Trichlorophenol																	
10	2-Chloronaphthalene																	
25	2-Nitroaniline																	
10	Dimethylphthalate																	
10	Acenaphthylene																	
10	2,6-Dinitrotoluene																	
25	3-Nitroaniline																	
10	Acenaphthene		27	37														
25	2,4-Dinitrophenol																	
25	4-Nitrophenol		38	46														
10	Dibenzofuran																	
10	2,4-Dinitrotoluene		26	32														
10	Diethylphthalate																	
10	4-Chlorophenyl-phenylether																	
10	Fluorene																	
25	4-Nitroaniline																	
25	4,6-Dinitro-2-methylphenol																	

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 3

Site Name: ERWIN TOWN LANDFILL

WATER SAMPLES

($\mu\text{g/L}$)Job Number: 9302-596 Sampling Date(s): 11/4-5/93To calculate sample quantitation limit:
(CRQL • Dilution Factor)

CRQL	Compound	Sample Number:	MSB	MW-2MS														
		Dilution Factor:	1.0	1.0														
		Location:	MATRIX SPIKE BLANK	MATRIX SPIKE														
10	N-Nitrosodiphenylamine																	
10	4-Bromophenyl-phenylether																	
10	Hexachlorobenzene																	
25	Pentachlorophenol		39	78														
10	Phenanthrene																	
10	Anthracene																	
10	Carbazole																	
10	Di-n-butylphthalate																	
10	Fluoranthene																	
10	Pyrene		28	24														
10	Butylbenzylphthalate																	
10	3,3'-Dichlorobenzidine																	
10	Benzo(a)anthracene																	
10	Chrysene																	
10	bis(2-Ethylhexyl)phthalate		2	J	1	J												
10	Di-n-octylphthalate																	
10	Benzo(b)fluoranthene																	
10	Benzo(k)fluoranthene																	
10	Benzo(a)pyrene																	
10	Indeno(1,2,3-cd)pyrene																	
10	Dibenz(a,h)anthracene																	
10	Benzo(g,h,i)perylene																	

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
($\mu\text{g/L}$)Job Number: 9302-596 Sampling Date(s): 11/4-5/93To calculate sample quantitation limit:
(CRQL $\times$ Dilution Factor)

CRQL	Compound	Sample Number:	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	PBLKWI
		Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		Location:								METHOD BLANK
0.05	alpha-BHC									
0.05	beta-BHC									
0.05	delta-BHC									
0.05	gamma-BHC (Lindane)									
0.05	Heptachlor									
0.05	Aldrin									
0.05	Heptachlor epoxide									
0.05	Endosulfan I									
0.10	Dieldrin									
0.10	4,4'-DDE									
0.10	Endrin									
0.10	Endosulfan II									
0.10	4,4'-DDD									
0.10	Endosulfan sulfate									
0.10	4,4'-DDT									
0.50	Methoxychlor		UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
0.10	Endrin ketone		UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
0.10	Endrin aldehyde		UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
0.05	alpha-Chlordane									
0.05	gamma-Chlordane									
5.0	Toxaphene									

CRQL = Contract Required Quantitation Limit.

Site Name: ERWIN TOWN LANDFILL

To calculate sample quantitation limit:
(CROL * Dilution Factor)

Job Number: 9302.596 Sampling Date(s): 11/4-5/93

[illegible]

02:YS7900 D4452-TWDS-02/15/94-DI

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
(µg/L)Job Number: 9302-596 Sampling Date(s): 11/4-5/93To calculate sample quantitation limit:
(CRQL • Dilution Factor)

CRQL	Compound	Sample Number:	MW-ZMS	MW-ZMSD	MSBI												
		Dilution Factor:	1.0	1.0	1.0												
		Location:	MATRIX SPIKE	MATRIX SPIKE DUPLICATE	MATRIX SPIKE BLANK												
0.05	alpha-BHC																
0.05	beta-BHC																
0.05	delta-BHC																
0.05	gamma-BHC (Lindane)		0.34	0.35	0.37												
0.05	Heptachlor		0.39	0.40	0.44												
0.05	Aldrin		0.32	0.32	0.40												
0.05	Heptachlor epoxide																
0.05	Endosulfan I																
0.10	Dieldrin		0.82 J	0.84 J	0.85												
0.10	4,4'-DDE																
0.10	Endrin		0.90	0.93	0.95												
0.10	Endosulfan II																
0.10	4,4'-DDD																
0.10	Endosulfan sulfate																
0.10	4,4'-DDT		0.56	0.56	0.70												
0.50	Methoxychlor		UJ	UJ	UJ												
0.10	Endrin ketone		UJ	UJ	UJ												
0.10	Endrin aldehyde		UJ	UJ	UJ												
0.05	alpha-Chlordane																
0.05	gamma-Chlordane																
5.0	Toxaphene																

CRQL = Contract Required Quantitation Limit.

E-90

DATA SUMMARY FORM: INORGANICS

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
(µg/L)Job Number: 9302-596 Sampling Date(s): 11/4-5/93Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.

CRQL	Sample Number: Dilution Factor: Location: Compound	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7							
		1.0	1.0	1.0	1.0	1.0	1.0	1.0							
200	Aluminum	114,000	J	1850		16,600		10,500	10,500	2510		175	J		
60	Antimony		UJ			1010									
10	Arsenic	49.1	J	22.9		39.5		26.1	16.5	3.3	J	21.6			
200	Barium	4840	J	648		784		995	665	412		1420			
5	Beryllium	5.3	J			0.84	J	0.48	J	0.42	J	0.27	J		
5	Cadmium	27.1	J			4.8	J	3.3	J	3.0	J				
5000	Calcium	380,000	J	121,000		184,000		126,000	206,000	135,000		204,000			
10	Chromium	202	J	7.8	J	166.5		23.2	28.0						
50	Cobalt	155	J	12.6	J	24.3	J	19.2	J	17.7	J	10.5	J		
25	Copper	498	J	15.0	J	49.8		39.0	51.5	11.8	J	30.3			
100	Iron	221,000	J	15,800		39,400		32,900	26,300	4660		2440			
3	Lead	278	J	18.9	J	98.3		28.1	75.3	3.3		2.2	J		
5000	Magnesium	147,000	J	103,000		54,100		44,000	50,000	25,400		50,800			
15	Manganese	38,500	J	1018		5090		4210	3650	7240		2670			
0.2	Mercury		UJ		UJ		UJ		UJ		UJ		UJ		
40	Nickel	322	J	17.9	J	53.1		33.1	J	40.3	J	10.8	84	J	
5000	Potassium	16200	J	159,000		6790		17000		28,800	J	2,000	1540	J	
5	Selenium		UJ												
10	Silver		UJ												
5000	Sodium	50,800	J	479,000		133,000		130,000		158,000		113,000	145,000		
10	Thallium	1.6	J		UJ		UJ		UJ		UJ		UJ		
50	Vanadium	174	J	8.9	J	32.4	J	20.6	J	19.3	J	10.5	J	3.4	J
20	Zinc	1240	J	80.2		200		708		482		229		34.1	
10	Cyanide														

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: INORGANICS

Site Name: ERWIN TOWN LANDFILLWATER SAMPLES
(µg/L)Job Number: 9302596 Sampling Date(s): 11/4-5/93Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.

CRQL	Compound	Sample Number:	MW-2S	MW-2D														
		Dilution Factor:	1.0	1.0														
		Location:	MATRIX SPIKE	MATRIX SPIKE DUPLICATE														
200	Aluminum			1861														
60	Antimony		439															
10	Arsenic		67.4	21.0														
200	Barium		2521	658														
5	Beryllium		44.0															
5	Cadmium		45.3															
5000	Calcium			122,200														
10	Chromium		190	7.77														
50	Cobalt		451	8.1														
25	Copper		249	13.2														
100	Iron			16,030														
3	Lead		40.5	23.0														
5000	Magnesium			64,760														
15	Manganese		1084	626														
0.2	Mercury		0.65 J	4J														
40	Nickel		444	14.1														
5000	Potassium			162,000														
5	Selenium		13.7															
10	Silver		46.9															
5000	Sodium			489,100														
10	Thallium		36.8 J	4J														
50	Vanadium		421	8.5														
20	Zinc		545	70.2														
10	Cyanide		437															

CRQL = Contract Required Quantitation Limit.

[illegible]

CRQL = Contract Required Quantitation Limit.

Site Name: Erwin Town Landfill

Job Number: 9400.907 Sampling Date(s): May 4, 1994

To calculate sample quantitation limit:
 (CROL * Dilution Factor) / ((100 - % moisture)/100)

[illegible]

NA = Not applicable.

Site Name: Erwin Town Landfill

Job Number: 9400,907 Sampling Date(s): May 4, 1994

[illegible]

NA = Not available

02 Y570 02 TS10 04 10

DATA SUMMARY FORM: VOLATILES 2

Site Name: Erwin Town Landfill

WASTE SAMPLES

Job Number: 9400.907 Sampling Date(s): May 4, 1994

(29/30)

Low Level

Low Level

To calculate sample quantitation limit:
 $\text{Detection Factor} / ((100 - \% \text{ moisture}) / 100)$

$$(\text{CRQL} \cdot \text{Dilution Factor}) / (100 - \% \text{ moisture} / 100)$$
[illegible]

CRQL = Contract Required Quantitation Limit.

N/A = Not applicable

WASTE SAMPLES -
(u/L)

Job Number: 9400.907 Sampling Date(s): May 4, 1994

**To calculate sample quantitation limit:
(CRQL ÷ Dilution Factor)**

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: VOLATILES 2

Site Name: Erwin Town Landfill

WASTE SAMPLES
(48/L)

Job Number: 9400.907 Sampling Date(s): May 4, 1994

To calculate sample quantitation limit:
(CRQL • Dilution Factor)

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S I

Site Name: Erwin Town LandfillWASTE SAMPLES
(ug/kg)Job Number: 9400 907 Sampling Date(s): May 4, 1994To calculate sample quantitation limit:
(CRQL * Dilution Factor) / (1 - % moisture/100)

CRQL	Compound	Sample Number:	DS-1	5BLK61	MSB	DS-145	DS-145D						
		Dilution Factor:	1.0	1.0	1.0	1.0	1.0						
		% Moisture:	22	NA	NA	22	22						
		Location:		Method Blank	Matrix Spike Blank	Matrix Spike	Matrix Spike Duplicate						
330	Phenol				1,400	1,800	1,900						
330	bis(2-Chloroethyl)ether												
330	2-Chlorophenol				1,300	1,600	1,500						
330	1,3-Dichlorobenzene												
330	1,4-Dichlorobenzene				940	1,100	970						
330	1,2-Dichlorobenzene												
330	2-Methylphenol												
330	2,2'-oxybis(1-chloropropane)												
330	4-Methylphenol												
330	N-Nitroso-di-n-propylamine				980	1,300	1,200						
330	Hexachloroethane												
330	Nitrobenzene												
330	Isophorone												
330	2-Nitrophenol												
330	2,4-Dimethylphenol												
330	bis(2-Chloroethoxy)methane												
330	2,4-Dichlorophenol												
330	1,2,4-Trichlorobenzene				1,000	1,200	1,100						
330	Naphthalene												
330	4-Chloroaniline												

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 2

Site Name: Erwin Town LandfillWASTE SAMPLES
(ug/kg)Job Number: 9400-907 Sampling Date(s): May 4, 1994To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:		Dilution Factor:		% Moisture:		Location:	
		DS-1	SBLKS1	MSB	DS-1MS	DS-1MSD			
		1.0	1.0	1.0	1.0	1.0			
		22	NA	NA	22	22			
			Method Blank	Matrix Spike Blank	Matrix Spike	Matrix Spike Duplicate			
330	Hexachlorobutadiene								
330	4-Chloro-3-methylphenol			1,400	2,000	1,800			
330	2-Methylnaphthalene			660					
330	Hexachlorocyclopentadiene								
330	2,4,6-Trichlorophenol								
800	2,4,5-Trichlorophenol								
330	2-Chloronaphthalene								
800	2-Nitroaniline								
330	Dimethylphthalate	230	J		110	J	170	J	
330	Acenaphthylene								
330	2,6-Dinitrotoluene								
800	3-Nitroaniline								
330	Acenaphthene			1,200	1,400	1,400			
800	2,4-Dinitrophenol								
800	4-Nitrophenol			1,600	1,400	1,200			
330	Dibenzofuran								
330	2,4-Dinitrotoluene			1,100	1,100	1,000			
330	Diethylphthalate		45	J					
330	4-Chlorophenyl-phenylether								
330	Fluorene								
800	4-Nitroaniline								
800	4,6-Dinitro-2-methylphenol								

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 3

Site Name: Erwin Town Landfill

WASTE SAMPLES

Job Number: 9400.907 Sampling Date(s): May 4, 1994

(ug/kg)

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Sample Number	Dilution Factor	% Moisture	Location	Compound	DS-1	SBLK51	MSB	DS-1MS	DS-1MSD								
						1.0	1.0	1.0	1.0	1.0								
						22	NA	NA	22	22								
							Method Blank	Matrix Spike Blank	Matrix Spike	Matrix Spike Duplicate								
330	N-Nitrosodiphenylamine																	
330	4-Bromophenyl-phenylether																	
330	Hexachlorobenzene																	
800	Pentachlorophenol							1,700	2,100	1,900								
330	Phenanthrene					460			260	J	170	J						
330	Anthracene					59	J											
330	Carbazole																	
330	Di-n-butylphthalate																	
330	Fluoranthene					390			260	J	160	J						
330	Pyrene					580	J	1,400	2,600	2,300								
330	Butylbenzylphthalate																	
330	3,3'-Dichlorobenzidine																	
330	Benzo(a)anthracene					240	J		190	J	130	J						
330	Chrysene					300	J		230	J	200	J						
330	bis(2-Ethylhexyl)phthalate					64	J		220	J	66	J						
330	Di-n-octylphthalate																	
330	Benzo(b)fluoranthene					310	J		260	J	220	J						
330	Benzo(k)fluoranthene					92	J		70	J								
330	Benzo(a)pyrene					230	J		170	J	140	J						
330	Indeno(1,2,3-cd)pyrene					180	J		180	J	110	J						
330	Dibenz(a,h)anthracene																	
330	Benzo(g,h,i)perylene					190	J		170	J	130	J						

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: PESTICIDES AND PCBs

Site Name: Erwin Town LandfillWASTE SAMPLES
(ug/L)Job Number: 9400.907 Sampling Date(s): May 4, 1994To calculate sample quantitation limit:
(CRQL * Dilution Factor)

CRQL	Compound	Sample Number:		Dilution Factor:		Location:									
		DM-N-3	PBLKWI	MSBW1	MSBW2	DM-N-7									
		1.0	1.0	1.0	1.0	1.0									
0.05	alpha-BHC														
0.05	beta-BHC														
0.05	delta-BHC														
0.05	gamma-BHC (Lindane)			0.35	0.38										
0.05	Heptachlor			0.28	0.32										
0.05	Aldrin			0.36	0.39										
0.05	Heptachlor epoxide	1.3	J												
0.05	Endosulfan I														
0.10	Dieldrin			0.70	0.71										
0.10	4,4'-DDE														
0.10	Endrin			0.64	0.72										
0.10	Endosulfan II														
0.10	4,4'-DDD														
0.10	Endosulfan sulfate	0.87	J			0.57	J								
0.10	4,4'-DDT			0.56	0.64										
0.50	Methoxychlor														
0.10	Endrin ketone														
0.10	Endrin aldehyde														
0.05	alpha-Chlordane														
0.05	gamma-Chlordane														
5.0	Toxaphene														

CRQL = Contract Required Quantitation Limit.

CRQL = Contract Required Quantitation Limit.

107.51

DATA SUMMARY FORM: PESTICIDES AND PCBs

Site Name: Erwin Town Landfill

WASTE SAMPLES
(ug/kg)

Job Number: 9400.907 Sampling Date(s): May 4, 1994

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number	DH-N-6	DH-S-2	DS-1	PBLK51	PBLK52	MSBS1	DS-145
		Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		% Moisture	0	0	25	NA	NA	0	25
		Location							
1.7	alpha-BHC								
1.7	beta-BHC								
1.7	delta-BHC								
1.7	gamma-BHC (Lindane)							13	13
1.7	Heptachlor							13	13
1.7	Aldrin							15	13
1.7	Heptachlor epoxide								
1.7	Endosulfan I								
3.3	Dieldrin							25	26
3.3	4,4'-DDE								
3.3	Endrin							25	27
3.3	Endosulfan II								
3.3	4,4'-DDD								
3.3	Endosulfan sulfate				1,000				
3.3	4,4'-DDT							24	27 J
17	Methoxychlor								
3.3	Endrin ketone								
3.3	Endrin aldehyde								
1.7	alpha-Chlordane								
1.7	gamma-Chlordane								
170	Toxaphene								

CRQL = Contract Required Quantitation Limit.

NA = Not applicable

E-106

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: Erwin Town LandfillWASTE SAMPLES
(pg/kg)Job Number: 9400.907 Sampling Date(s): May 4, 1994To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:										
		Dilution Factor:										
		% Moisture:										
		Location:										
		DS-945D										
		1.0										
		25										
		Matry Spike Duplicate										
1.7	alpha-BHC											
1.7	beta-BHC											
1.7	delta-BHC											
1.7	gamma-BHC (Lindane)	14										
1.7	Heptachlor	14										
1.7	Aldrin	15										
1.7	Heptachlor epoxide											
1.7	Endosulfan I											
3.3	Dieldrin	25										
3.3	4,4'-DDE											
3.3	Endrin	26										
3.3	Endosulfan II											
3.3	4,4'-DDD											
3.3	Endosulfan sulfate											
3.3	4,4'-DDT	29										
17	Methoxychlor	23										
3.3	Endrin ketone											
3.3	Endrin aldehyde											
1.7	alpha-Chlordane											
1.7	gamma-Chlordane											
170	Toxaphene											

CRQL = Contract Required Quantitation Limit.

Site Name: Erwin Town Landfill

WASTE SAMPLES
(ug/kg)

Job Number: 9400.907 Sampling Date(s): May 4, 1994

To calculate sample quantitation limit:
 $(\text{CRQL} \cdot \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: INORGANICS

Site Name: Erwin Town Landfill

WASTE SAMPLES (Pb only)

Job Number: 9400.907 Sampling Date(s): May 4, 1994

**Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.**

[illegible]

CRQL = Contract Required Quantitation Limit.

Site Name: Erwin Town LandfillWASTE SAMPLES
(mg/kg)Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.Job Number: 9400.907 Sampling Date(s): May 4, 1994

CRQL	Sample Number	DS-1	DS-1S	DS-1D																
	Dilution Factor	1.0	1.0	1.0																
	% Solids	78.4	78.4	78.4																
	Location		Matrix Spike	Matrix Duplicate																
Compound																				
40	Aluminum	5680			5870															
12	Antimony	10	J	36.4																
2	Arsenic	12.2	J	12.7	10.0															
40	Barium	76.2		329	77.0															
1	Beryllium	0.30		6.67	0.36															
1	Cadmium	0.81	J	9.20	0.87															
1000	Calcium	1930			2009															
2	Chromium	11.6		36.8	12.4															
10	Cobalt	8.6		70.8	9.21															
5	Copper	26.1		57.6	27.3															
20	Iron	16,400			16,600															
0.6	Lead	102		88.7	90.5															
1000	Magnesium	2590			2900															
3	Manganese	349		420	353															
0.2	Mercury			0.71																
8	Nickel	29.6		84.4	25.8															
1000	Potassium	1637			798															
1	Selenium	1.4	J	1.74	1.23															
2	Silver			5.24																
1000	Sodium																			
2	Thallium			5.33																
10	Vanadium	10.8		66.0	12.2															
4	Zinc	264	J	395	252															
2	Cyanide			28.6	1.5															

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: RCQA CHARACTERISTICS

Site Name: ERWIN TOWN LANDFILL

WASTE SAMPLES

Job Number: 9400.907 Sampling Date(s): MAY 4, 1994

To calculate sample quantitation limit:
 $(CRQL \cdot \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

NA = NOT ANALYZED

E-112

To calculate sample quantitation limit:
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

CRQL = Contract Required Quantitation Limit.
NA = NOT ANALYZED

DATA SUMMARY FORM: TCLP

Site Name: Erwin Town Landfill

WASTE SAMPLES
(mg/L)

Job Number: 9400.907 Sampling Date(s): May 4, 1994

To calculate sample quantitation limit:
 $(CRL \times \text{Dilution Factor}) / (100 - \% \text{ moisture}/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

E-114

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW5A

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

ix: (soil/water) SOIL

Lab Sample ID: 73061

le wt/vol: 30.0 (g/mL) G

Lab File ID: E5889

l: (low/med) LOW

Date Received: 10/06/93

isture: 24 decanted: (Y/N) N

Date Extracted: 11/04/93

entrated Extract Volume: 500.0 (uL)

Date Analyzed: 11/09/93

ction Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) Y pH: 7.9

er TICs found: 17

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

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
12-34-22	Aldol Condensation Product	6.24	57000	ABJN
.	UNKNOWN	7.64	2400	BJ
.	UNKNOWN	13.79	440	BJ
.	UNKNOWN HYDROCARBON	22.42	110	J
.	UNKNOWN	25.95	130	J
.	UNKNOWN HYDROCARBON	26.33	150	J
10-54-4500	Molecular Sulfur	27.21	2100	JN
.	UNKNOWN PAH	29.03	240	J
.	UNKNOWN HYDROCARBON	31.09	110	J
.	UNKNOWN PAH	33.53	110	J
.	UNKNOWN HYDROCARBON	34.11	110	J
.	UNKNOWN HYDROCARBON	37.69	150	J
.	UNKNOWN HYDROCARBON	39.77	110	J
.	UNKNOWN	40.05	130	J
.	UNKNOWN	40.24	280	J
.	UNKNOWN	40.65	330	J
.	UNKNOWN	41.59	130	J

R
↓

FORM I SV-TIC

3/90

E-115

375

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW6

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) SOIL

Lab Sample ID: 73441

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: B9754

Level: (low/med) LOW

Date Received: 10/09/93

Moisture: 33 decanted: (Y/N) N

Date Extracted: 10/13/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 11/01/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 7.2

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

Number TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.30	120	N/J
2.	UNKNOWN	9.46	150	N/J
3.	UNKNOWN	10.34	370	N/J
4.	UNKNOWN CARBOXYLIC ACID	22.24	200	N/J

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SBLKS1

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

rix: (soil/water) SOIL

Lab Sample ID: SBLKS_10-11

ple wt/vol: 30.0 (g/mL) G

Lab File ID: B9716

el: (low/med) LOW

Date Received:

oisture: decanted: (Y/N) N

Date Extracted: 10/11/93

centrated Extract Volume: 500.0 (uL)

Date Analyzed: 10/29/93

ection Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) Y

pH:

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

ber TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 12-34-22	Aldol Condensation Product	2.84	63000	AJN
2.	UNKNOWN	4.11	83	N/J
3.	UNKNOWN	10.39	280	N/J
4.	UNKNOWN	18.73	66	N/J

FORM I SV-TIC

3/90

E-117

519

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SBLKW1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) WATER

Lab Sample ID: SBLKW_10-20

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B9732

Level: (low/med) LOW

Date Received:

Moisture: decanted: (Y/N)

Date Extracted: 10/20/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/30/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

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

Number TICs found: 0

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

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SBLKS2

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

ix: (soil/water) SOIL

Lab Sample ID: SBLKS_10-13

ple wt/vol: 30.0 (g/mL) G

Lab File ID: B9746

el: (low/med) LOW

Date Received:

disture: decanted: (Y/N) N

Date Extracted: 10/13/93

centrated Extract Volume: 500.0 (uL)

Date Analyzed: 11/01/93

ection Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) Y

pH:

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

er TICs found: 12

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.46	100	N/J
2.	UNKNOWN	10.35	300	N/J
3.	UNKNOWN CARBOXYLIC ACID	22.25	66	N/J
4.	UNKNOWN	24.85	130	N/J
5.	UNKNOWN	25.12	66	N/J
6.	UNKNOWN	27.03	180	N/J
7.	UNKNOWN HYDROCARBON	28.20	83	N/J
8.	UNKNOWN HYDROCARBON	29.19	83	N/J
9.	UNKNOWN HYDROCARBON	30.15	120	N/J
10.	UNKNOWN	31.06	130	N/J
11.	UNKNOWN HYDROCARBON	31.95	100	N/J
12.	UNKNOWN HYDROCARBON	32.81	83	N/J

FORM I SV-TIC

3/90

E-119

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SBLKS3

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) SOIL

Lab Sample ID: SBLKS_11-04

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E5888

Level: (low/med) LOW

Date Received:

Moisture: decanted: (Y/N) N

Date Extracted: 11/04/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 11/09/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH:

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

Number TICs found: 5

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 12-34-22	Aldol Condensation Product	5.84	48000	AJN
2.	UNKNOWN	7.67	2000	NJ
3.	UNKNOWN	12.77	200	NJ
4.	UNKNOWN	13.80	370	NJ
5.	UNKNOWN	15.97	83	NJ

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: 75213

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: E5996

Level: (low/med) LOW

Date Received: 11/06/93

Moisture: decanted: (Y/N)

Date Extracted: 11/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/15/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

C Cleanup: (Y/N) N

pH: 7.1

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.32	2	NJ
2.	UNKNOWN	7.45	4	NJ
3.	UNKNOWN	7.52	2	NJ

FORM I SV-TIC

3/90

E-121

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-2

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: 75214

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: E5997

Level: (low/med) LOW

Date Received: 11/06/93

Moisture: decanted: (Y/N)

Date Extracted: 11/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/16/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.1

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 12-34-22	Aldol Condensation Product	5.18	2	AJN
2.	UNKNOWN	11.51	4	NJ
3.	UNKNOWN TERPENOID	12.76	8	NJ
4.	UNKNOWN	12.85	2	NJ
5.	UNKNOWN	13.29	4	NJ
6.	UNKNOWN	13.64	3	NJ
7.	UNKNOWN	14.72	5	NJ
8.	UNKNOWN	15.00	5	NJ
9.	UNKNOWN	15.15	4	NJ
10.	UNKNOWN	15.20	4	NJ
11.	UNKNOWN	15.37	17	NJ
12.	UNKNOWN	15.71	24	NJ
13.	UNKNOWN	15.83	14	NJ
14.	UNKNOWN	15.91	2	NJ
15.	UNKNOWN	16.37	4	NJ
16.	UNKNOWN	23.17	2	NJ
17.	UNKNOWN	23.64	4	NJ
18.	UNKNOWN CARBOXYLIC ACID	25.85	2	NJ
19.	UNKNOWN CARBOXYLIC ACID	28.31	2	NJ
20.	UNKNOWN	41.88	3	NJ

FORM I SV-TIC

3/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-3

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: 75215

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: E5998

Level: (low/med) LOW

Date Received: 11/06/93

Preparation: decanted: (Y/N)

Date Extracted: 11/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/16/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) N pH: 6.8

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

Number of TICs found: 10

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.33	2	N/J
2. 12-34-22	Aldol Condensation Product	5.23	4	AJN
3.	UNKNOWN	11.51	2	N/J
4.	UNKNOWN TERPENOID	12.76	5	N/J
5.	UNKNOWN	13.29	4	N/J
6.	UNKNOWN	13.78	6	N/J
7.	UNKNOWN	15.39	10	N/J
8.	UNKNOWN	15.53	3	N/J
9.	UNKNOWN	23.77	6	N/J
10.	PHENYLETHYLPHENOL ISOMER	24.08	4	N/J

FORM I SV-TIC

3/90

E-123

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-4

Lab Name: E & E INC.

Contract:

Lab Code: EAND E

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: 75216

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: E5999

Level: (low/med) LOW

Date Received: 11/06/93

Moisture: decanted: (Y/N)

Date Extracted: 11/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/16/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 6.9

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.34	2	NBJ
2.	UNKNOWN	13.30	2	NJ
3.	UNKNOWN	13.78	3	NJ
4.	UNKNOWN	14.87	5	NJ
5.	UNKNOWN	15.58	5	NJ
6.	UNKNOWN	16.32	2	NJ
7.	UNKNOWN	21.90	2	NJ

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-5

Company Name: E & E INC.

Contract:

Code: EAND E

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: 75217

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: E6000

Level: (low/med) LOW

Date Received: 11/06/93

Moisture: decanted: (Y/N)

Date Extracted: 11/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/16/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) N pH: 7.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.28	2	AJ
2. 12-34-22	Alcohol Condensation Product	5.18	7	AJN
3.	UNKNOWN	15.34	7	AJ

FORM I SV-TIC

3/90

E-125

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-6

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: 75218

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: E6001

Level: (low/med) LOW

Date Received: 11/06/93

% Moisture: decanted: (Y/N)

Date Extracted: 11/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/16/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 6.7

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.26	2	NBJ
2. 12-34-22	Aldol Condensation Product	5.18	6	AJN
3.	UNKNOWN	6.07	10	NJ
4.	UNKNOWN	13.26	4	NJ

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-7

Name: E & E INC. Contract:
Code: EANDE Case No.: 596 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: 75219
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6002
Level: (low/med) LOW Date Received: 11/06/93
Moisture: decanted: (Y/N) Date Extracted: 11/11/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/93
Injection Volume: 2.0(uL) Dilution Factor: 1.0
Cleanup: (Y/N) N pH: 7.3

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

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

FORM I SV-TIC

3/90

E-127

301

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SBLKW1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: SBLKW_11-11

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: E5994

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N)

Date Extracted: 11/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/15/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.23	2	✓J
2.	UNKNOWN	4.31	3	✓J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-6

Name: E & E INC.

Contract:

Code: EAND E

Case No.: 596

SAS No.:

SDG No.: MW-1

ix: (soil/water) WATER

Lab Sample ID: 75218

le wt/vol: 5.0 (g/mL) ML

Lab File ID: C3834

l: (low/med) LOW

Date Received: 11/06/93

isture: not dec.

Date Analyzed: 11/10/93

olumn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

ber TICs found: 0

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

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

E-129

65

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-7

Lab Name: E & E INC.

Contract:

Lab Code: EANDL

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: 75219

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D9345

Level: (low/med) LOW

Date Received: 11/06/93

Moisture: not dec.

Date Analyzed: 11/11/93

GC Column: VOCOL 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/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	25.67	8 μ J	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

STORAGE_BLK

o Name: E & E INC. Contract:
o Code: EANDE Case No.: 596 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: 75221
ple wt/vol: 5.0 (g/mL) ML Lab File ID: D9412
vel: (low/med) LOW Date Received: 11/06/93
Moisture: not dec. Date Analyzed: 11/15/93
Column: VOCOL ID: 0.530 (mm) Dilution Factor: 1.0
l Extract Volume: (uL) Soil Aliquot Volume: (uL)
umber TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

E-131

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

TBYR7000

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: 75220

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D9346

Level: (low/med) LOW

Date Received: 11/06/93

Moisture: not dec.

Date Analyzed: 11/12/93

Column: VOCOL 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/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	25.64	5 NJ	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

VBLKW1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: VBLKW1

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: C3822

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 11/10/93

Column: VOCOL 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/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

E-133

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

VBLKW2

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: VBLKW2

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D9340

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 11/11/93

GC Column: VOCOL 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/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	21.77	6	N/J
2.	UNKNOWN	25.66	8	N/J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

VBLKW3

b Name: E & E INC.

Contract:

b Code: EAND E

Case No.: 596

SAS No.:

SDG No.: MW-1

trix: (soil/water) WATER

Lab Sample ID: VBLKW3

mple wt/vol: 5.0 (g/mL) ML

Lab File ID: D9411

vel: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 11/15/93

Column: VOCOL

ID: 0.530 (mm)

Dilution Factor: 1.0

il Extract Volume: (uL)

Soil Aliquot Volume: (uL)

umber TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	25.63	8	N/J

FORM I VOA-TIC

3/90

E-135

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MSB

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: MSB

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D9350

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 11/12/93

GC Column: VOCOL 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/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
	UNKNOWN	25.66	8	W/XJ

FORM I VOA-TIC

3/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

DW-1

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

rix: (soil/water) WATER

Lab Sample ID: 73060

ple wt/vol: 1000 (g/mL) ML

Lab File ID: B9733

el: (low/med) LOW

Date Received: 10/06/93

oisture: decanted: (Y/N)

Date Extracted: 10/20/93

centrated Extract Volume: 1000 (uL)

Date Analyzed: 10/30/93

ection Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) N pH: 8.0

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

ber TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	PROPYLBENZENE ISOMER	4.50	2	N/J

FORM I SV-TIC

3/90

E-137

266

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) SOIL

Lab Sample ID: 73440

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: B9753

Level: (low/med) LOW

Date Received: 10/09/93

Moisture: 13 decanted: (Y/N) N

Date Extracted: 10/13/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 11/01/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 9.2

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

Number TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.32	290	NJ
2.	UNKNOWN	24.84	150	NJ
3.	UNKNOWN	27.03	130	NBJ
4.	UNKNOWN HYDROCARBON	30.13	76	NJ

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-2

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

rix: (soil/water) SOIL

Lab Sample ID: 73020

ple wt/vol: 30.0 (g/mL) G

Lab File ID: B9755

el: (low/med) LOW

Date Received: 10/06/93

oisture: 25 decanted: (Y/N) N

Date Extracted: 10/11/93

centrated Extract Volume: 500.0 (uL)

Date Analyzed: 11/01/93

ection Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) Y pH: 8.2

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

ber TICs found: 21

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 12-34-22	Aldol Condensation Product	2.66	6600	ABJN
2.	UNKNOWN HYDROCARBON	10.56	550	N/J
3.	DIMETHYLNAPHTHALENE ISOMER	11.24	400	N/J
4. 90-12-0	1-Methylnaphthalene	12.32	640	JN
5.	UNKNOWN HYDROCARBON	12.45	910	N/J
6.	ETHYLNAPHTHALENE ISOMER	13.80	1600	N/J
7.	DIMETHYLNAPHTHALENE ISOMER	14.02	2400	N/J
8.	DIMETHYLNAPHTHALENE ISOMER	14.20	5300	N/J
9.	DIMETHYLNAPHTHALENE ISOMER	14.54	1100	N/J
10.	DIMETHYLNAPHTHALENE ISOMER	14.74	530	N/J
11.	UNKNOWN	15.32	420	N/J
12.	TRIMETHYLNAPHTHALENE ISOMER	15.62	1200	N/J
13.	UNKNOWN HYDROCARBON	15.80	1300	N/J
14.	TRIMETHYLNAPHTHALENE ISOMER	15.91	530	N/J
15.	TRIMETHYLNAPHTHALENE ISOMER	16.02	930	N/J
16.	TRIMETHYLNAPHTHALENE ISOMER	16.21	820	N/J
17.	TRIMETHYLNAPHTHALENE ISOMER	16.29	510	N/J
18.	TRIMETHYLNAPHTHALENE ISOMER	16.49	1700	N/J
19. 24-89-863	1-(2-propenyl)-naphthalene	16.87	440	JN
20.	UNKNOWN HYDROCARBON	17.33	1400	N/J
21.	UNKNOWN HYDROCARBON	18.78	1800	N/J

FORM I SV-TIC

3/90

E-139

285

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-3

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) SOIL

Lab Sample ID: 73021

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: B9756

Level: (low/med) LOW

Date Received: 10/06/93

Moisture: 14 decanted: (Y/N) N

Date Extracted: 10/11/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 11/01/93

Injection Volume: 2.0(uL)

Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y

pH: 8.2

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 12-34-22	Aldol Condensation Product	2.11	12000	ABJN
2.	UNKNOWN HYDROCARBON	21.41	480	MJ
3.	UNKNOWN	22.56	750	MJ
4.	UNKNOWN	24.78	560	MJ
5.	UNKNOWN	32.73	580	MJ
6.	UNKNOWN	33.44	540	MJ

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW4A

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) SOIL

Lab Sample ID: 73062

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: B9723

Level: (low/med) LOW

Date Received: 10/06/93

Moisture: 15 decanted: (Y/N) N

Date Extracted: 10/11/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 10/30/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) Y pH: 8.4

Number of TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.87	98	N/J
2.	UNKNOWN	9.34	160	N/J
3.	UNKNOWN HYDROCARBON	30.19	78	N/J

FORM I SV-TIC

3/90

E-141

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

DW-1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) WATER

Lab Sample ID: 73060

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: C3067

Level: (low/med) LOW

Date Received: 10/06/93

Moisture: not dec.

Date Analyzed: 10/09/93

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	PROPYLBENZENE ISOMER	22.44	20	NJ
2.	TRIMETHYLBENZENE ISOMER	22.65	6	NJ
3.	PROPYLBENZENE ISOMER	23.03	7	NJ
4.	TRIMETHYLBENZENE ISOMER	23.43	26	NJ
5.	PROPYLBENZENE ISOMER	24.23	8	NJ
6. 49-61-17	Indane	24.54	5	JN

FORM I VOA-TIC

3/90

E-142

40

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW1

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

rix: (soil/water) SOIL

Lab Sample ID: 73440

ple wt/vol: 5.0 (g/mL) G

Lab File ID: H5142

el: (low/med) LOW

Date Received: 10/09/93

oisture: not dec. 13

Date Analyzed: 10/14/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

l Extract Volume: (uL)

Soil Aliquot Volume: (uL)

mber TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

E-143

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-2

ab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

atrix: (soil/water) SOIL

Lab Sample ID: 73020

Sample wt/vol: 5.1 (g/mL) G

Lab File ID: D8908

Level: (low/med) LOW

Date Received: 10/06/93

Moisture: not dec. 25

Date Analyzed: 10/13/93

GC Column: VOCOL 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	21.41	7	✓/BJ
2.	UNKNOWN	25.42	10	✓/BJ

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-3

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

rix: (soil/water) SOIL

Lab Sample ID: 73021

ple wt/vol: 5.0 (g/mL) G

Lab File ID: D8877

el: (low/med) LOW

Date Received: 10/06/93

oisture: not dec. 14

Date Analyzed: 10/11/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

l Extract Volume: (uL)

Soil Aliquot Volume: (uL)

mber TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN OXY. HYDROCARBON	15.50	6	NJ
2.	UNKNOWN OXY. HYDROCARBON	25.22	6	NJ
3.	UNKNOWN	25.45	8	NJ

FORM I VOA-TIC

3/90

E-145

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW4A

Lab Name: E & E INC. Contract:
 Lab Code: EANDE Case No.: 255 SAS No.: SDG No.: MW-2
 Matrix: (soil/water) SOIL Lab Sample ID: 73062
 Sample wt/vol: 5.5 (g/mL) G Lab File ID: D8882
 Level: (low/med) LOW Date Received: 10/06/93
 Moisture: not dec. 15 Date Analyzed: 10/12/93
 GC Column: VOCOL ID: 0.530 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 3 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	9.65	15	N/J
2.	UNKNOWN	25.24	7	N/J
3.	UNKNOWN	25.46	17	N/J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW5A

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

rix: (soil/water) SOIL

Lab Sample ID: 73061

ple wt/vol: 5.1 (g/mL) G

Lab File ID: D8878

el: (low/med) LOW

Date Received: 10/06/93

oisture: not dec. 24

Date Analyzed: 10/12/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

l Extract Volume: (uL)

Soil Aliquot Volume: (uL)

mber TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	25.23	10	A/J

FORM I VOA-TIC

3/90

E-147

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW6

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) SOIL

Lab Sample ID: 73441

Sample wt/vol: 5.2 (g/mL) G

Lab File ID: H5129

Level: (low/med) LOW

Date Received: 10/09/93

% Moisture: not dec. 33

Date Analyzed: 10/14/93

GC Column: VOCOL 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
-----	-----	-----	-----	-----

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

STORAGE_BLK

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) WATER

Lab Sample ID: 73022

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: C3066

Level: (low/med) LOW

Date Received: 10/06/93

Purity: not dec.

Date Analyzed: 10/09/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Injection Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

E-149

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

VBKWK1

Lab Name: E & E INC.

Contract:

Lab Code: EAND

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) WATER

Lab Sample ID: VOA_BLANK

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: C3060

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/09/93

GC Column: VOCOL 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/L

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBKKS1

Name: E & E INC. Contract:
 Code: EANDE Case No.: 255 SAS No.: SDG No.: MW-2
 Matrix: (soil/water) SOIL Lab Sample ID: VOA_HEAT_BLK
 Sample wt/vol: 5.0 (g/mL) G Lab File ID: D8873
 Level: (low/med) LOW Date Received:
 Moisture: not dec. Date Analyzed: 10/11/93
 Column: VOCOL ID: 0.530 (mm) Dilution Factor: 1.0
 1 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.	UNKNOWN	25.41	5	N/J

FORM I VOA-TIC

3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

VBLS2

ab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) SOIL

Lab Sample ID: VOA_HEAT_BLK

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: D8907

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 10/12/93

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

oil 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	21.44	10	N/J
2.	UNKNOWN	25.41	12	N/J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

VBKKS3

Name: E & E INC. Contract:
Code: EAND Case No.: 255 SAS No.: SDG No.: MW-2
Matrix: (soil/water) SOIL Lab Sample ID: VOA_HEAT_BLK
Sample wt/vol: 5.0 (g/mL) G Lab File ID: H5127
Level: (low/med) LOW Date Received:
Moisture: not dec. Date Analyzed: 10/13/93
Column: VOCOL ID: 0.530 (mm) Dilution Factor: 1.0
Eluent 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
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MSB

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 255

SAS No.:

SDG No.: MW-2

Matrix: (soil/water) SOIL

Lab Sample ID: SPIKE_BLANK

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: D8881

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/12/93

GC Column: VOCOL 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.	UNKNOWN	25.44	9	A/J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-1

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: 75213

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: C3823

Level: (low/med) LOW

Date Received: 11/06/93

Disturbance: not dec.

Date Analyzed: 11/10/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Initial Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

E-155

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-2

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: 75214

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D9347

Level: (low/med) LOW

Date Received: 11/06/93

Moisture: not dec.

Date Analyzed: 11/12/93

GC Column: VOCOL 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/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	25.64	6	N/J

FORM I VOA-TIC

3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-3

Name: E & E INC.

Contract:

Code: EAND

Case No.: 596

SAS No.:

SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: 75215

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: C3828

Level: (low/med) LOW

Date Received: 11/06/93

Moisture: not dec.

Date Analyzed: 11/10/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-4

Lab Name: E & E INC. Contract:
Lab Code: EANDE Case No.: 596 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: 75216
Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C3829
Level: (low/med) LOW Date Received: 11/06/93
Moisture: not dec. Date Analyzed: 11/10/93
GC Column: VOCOL 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/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.18	34	N/J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MW-5

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 596

SAS No.:

SDG No.: MW-1

ix: (soil/water) WATER

Lab Sample ID: 75217

le wt/vol: 5.0 (g/mL) ML

Lab File ID: C3833

l: (low/med) LOW

Date Received: 11/06/93

isture: not dec.

Date Analyzed: 11/10/93

olumn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

per TICs found: 0

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

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

W-1DL

Lab Name: E & E INC.

Contract:

I b Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68969DL

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: H2148

Level: (low/med) MED

Date Received: 08/06/93

% Moisture: not dec. 15

Date Analyzed: 08/17/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 2.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 100 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

VBLKW1

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) WATER

Lab Sample ID: VOA_METH_BLK

le wt/vol: 5.0 (g/mL) ML

Lab File ID: D7189

l: (low/med) LOW

Date Received:

isture: not dec.

Date Analyzed: 08/11/93

olumn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

ber TICs found: 0

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

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

376

E-161

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBKWK2

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) WATER

Lab Sample ID: VOA_BLANK

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D7217

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 08/12/93

GC Column: VOCOL 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/L

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

VBLKS1

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) SOIL

Lab Sample ID: VOA_METH_BLK

le wt/vol: 5.0 (g/mL) G

Lab File ID: F2785

l: (low/med) LOW

Date Received:

isture: not dec.

Date Analyzed: 08/13/93

olumn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

ber TICs found: 1

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

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
.	UNKNOWN	22.40	11	WJ

FORM I VOA-TIC

3/90

387

E-163

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC 3 1993

VBKLS2

Client Name: E & E INC.

Contract:

Lab Code: EANDL

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: VOA_METH_BLK

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: F2799

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 08/14/93

GC Column: VOCOL 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. 11-05-43	Hexane	5.65	6	JN
2.	UNKNOWN	22.42	15	NJ

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

VBLS3

Name: E & E INC.

Contract:

Code: EAND

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) SOIL

Lab Sample ID: VOA_BLK

le wt/vol: 5.0 (g/mL) G

Lab File ID: F2818

el: (low/med) LOW

Date Received:

isture: not dec.

Date Analyzed: 08/14/93

olumn: VOCOL

ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

ber TICs found: 2

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

SAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
11-05-43	Hexane	5.65	6	JN
	UNKNOWN	22.44	30	N/J

FORM I VOA-TIC

3/90

E-165

404

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKM1

Lab Name: E & E INC.

Contract:

Lab Code: EAND E

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: VOA_MEOH_BLK

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: H2139

Level: (low/med) MED

Date Received:

Moisture: not dec.

Date Analyzed: 08/16/93

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 100 (uL)

Number TICs found: 0

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

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MSB

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) WATER

Lab Sample ID: MSB

ple wt/vol: 5.0 (g/mL) ML

Lab File ID: D7196

el: (low/med) LOW

Date Received: 08/06/93

disture: not dec.

Date Analyzed: 08/12/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

l Extract Volume: (uL)

Soil Aliquot Volume: (uL)

umber TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

420

E-167

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MSB1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: MAT_SPK_BLK

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: H2146

Level: (low/med) MED

Date Received:

Moisture: not dec.

Date Analyzed: 08/17/93

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 100 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

MSB2

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) SOIL

Lab Sample ID: VOA_SPK_BLK

le wt/vol: 5.0 (g/mL) G

Lab File ID: F2786

l: (low/med) LOW

Date Received:

isture: not dec.

Date Analyzed: 08/13/93

olumn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

ber TICs found: 1

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

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----
.	UNKNOWN	22.42	5	N/EJ

FORM I VOA-TIC

3/90

439

E-169

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SD-1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68857

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E4496

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: 30 decanted: (Y/N) N

Date Extracted: 08/11/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/20/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 8.0

Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.15	2600	N/J
2.	UNKNOWN	5.61	4300	N/J
3. 12-34-22	Aldol Condensation Product	6.44	50000	ABJN
4.	UNKNOWN	8.36	1300	N/J
5.	UNKNOWN	14.23	95	N/J
6.	UNKNOWN HYDROCARBON	34.98	95	N/J
7.	UNKNOWN PAH	36.45	170	N/J
8.	UNKNOWN HYDROCARBON	38.58	190	N/J
9.	UNKNOWN	39.07	140	N/J

FORM I SV-TIC

3/90

E-170

527

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SD-2

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) SOIL

Lab Sample ID: 68858

le wt/vol: 30.0 (g/mL) G

Lab File ID: E4497

l: (low/med) LOW

Date Received: 08/06/93

isture: 25 decanted: (Y/N) N

Date Extracted: 08/11/93

entrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/20/93

ction Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) Y pH: 7.8

er TICs found: 7

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

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----
.	UNKNOWN	5.14	1300	NJ
.	UNKNOWNW	5.59	3800	NJ
. 12-34-22	Aldol Condensation Product	6.44	45000	ABJN
.	UNKNOWN	8.36	1500	NJ
.	UNKNOWN	14.22	130	NJ
.	UNKNOWN	35.69	110	NJ
.	UNKNOWN HYDROCARBON	38.58	89	NJ

FORM I SV-TIC

3/90

E-171

554

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SD-3

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68859

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E4498

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: 24 decanted: (Y/N) N

Date Extracted: 08/11/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/20/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 8.2

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

Number TICs found: 6

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.15	940	J
2.	UNKNOWN	5.59	3700	NBJ
3. 12-34-22	Aldol Condensation Product	6.43	44000	ABJN
4.	UNKNOWN	7.55	130	NJ
5.	UNKNOWN	8.36	1400	NBJ
6.	UNKNOWN	14.21	87	NJ

FORM I SV-TIC

3/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SD-4

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) SOIL

Lab Sample ID: 68860

le wt/vol: 30.0 (g/mL) G

Lab File ID: E4503

l: (low/med) LOW

Date Received: 08/06/93

isture: 50 decanted: (Y/N) N

Date Extracted: 08/11/93

entrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/20/93

ction Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) Y pH: 7.5

er TICs found: 14

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

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
.	UNKNOWN	5.10	5600	NJ
.	UNKNOWN	5.57	6600	NJ
. 12-34-22	Aldol Condensation Product	6.41	93000	AJN
.	UNKNOWN	7.56	130	NJ
.	UNKNOWN	8.36	2200	NJ
.	UNKNOWN	14.22	370	NJ
.	UNKNOWN HYDROCARBON	28.57	170	NJ
.	UNKNOWN HYDROCARBON	30.88	170	NJ
.	UNKNOWN HYDROCARBON	33.00	230	NJ
.	UNKNOWN HYDROCARBON	34.98	400	NJ
.	UNKNOWN	36.92	270	NJ
.	UNKNOWN	38.04	170	NJ
.	UNKNOWN HYDROCARBON	38.58	600	NJ
.	UNKNOWN	42.69	830	NJ

FORM I SV-TIC

3/90

586

E-173

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SD-5

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68861

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E4504

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: 37 decanted: (Y/N) N

Date Extracted: 08/11/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/20/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 9.0

Number TICs found: 18

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.53	2600	N/J
2.	UNKNOWN	4.89	4200	N/J
3. 12-34-22	Aldol Condensation Product	6.34	42000	ABJN
4.	UNKNOWN	8.52	400	N/J
5.	UNKNOWN	14.22	210	N/J
6.	UNKNOWN HYDROCARBON	22.94	130	N/J
7.	UNKNOWN	25.51	180	N/J
8.	UNKNOWN	25.76	400	N/J
9.	UNKNOWN HYDROCARBON	27.83	290	N/J
10.	UNKNOWN HYDROCARBON	27.89	290	N/J
11.	UNKNOWN	36.51	550	N/J
12.	UNKNOWN	37.38	4000	N/J
13.	UNKNOWN	38.26	4200	N/J
14.	UNKNOWN	39.22	14000	N/J
15.	UNKNOWN	40.31	6100	N/J
16.	UNKNOWN	41.60	12000	N/J
17.	UNKNOWN	43.08	1100	N/J
18.	UNKNOWN	44.89	580	N/J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SD-1

Client: E & E INC.

Contract:

Client: EANDER

Case No.: 702

SAS No.:

SDG No.: SD-1

(soil/water) SOIL

Lab Sample ID: 68857

wt/vol: 5.0 (g/mL) G

Lab File ID: F2787

(low/med) LOW

Date Received: 08/06/93

Pressure: not dec. 30

Date Analyzed: 08/13/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

TICs found: 1

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

NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1-05-43	Hexane	5.61	9	14 JNB

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SD-2

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68858

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: F2788

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: not dec. 25

Date Analyzed: 08/13/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

1 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. 11-05-43	Hexane	5.61	8	7.7 JNB
2.	UNKNOWN	22.41	11	11.5

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SD-3

e: E & E INC.

Contract:

e: EAND E

Case No.: 702

SAS No.:

SDG No.: SD-1

(soil/water) SOIL

Lab Sample ID: 68859

wt/vol: 5.0 (g/mL) G

Lab File ID: F2789

(low/med) LOW

Date Received: 08/06/93

ure: not dec. 24

Date Analyzed: 08/13/93

mn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

tract Volume: (uL)

Soil Aliquot Volume: (uL)

TICs found: 2

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

NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1-05-43	Hexane	5.60	7	7 JNB
	UNKNOWN	22.42	7 NJ	7

E-177

68

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SD-4

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68860

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: F2790

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: not dec. 50

Date Analyzed: 08/13/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SD-5

e: E & E INC.

Contract:

e: EAND E

Case No.: 702

SAS No.:

SDG No.: SD-1

(soil/water) SOIL

Lab Sample ID: 68861

wt/vol: 5.0 (g/mL) G

Lab File ID: F2820

(low/med) LOW

Date Received: 08/06/93

ure: not dec. 27

Date Analyzed: 08/14/93

mn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

tract Volume: (uL)

Soil Aliquot Volume: (uL)

TICs found: 7

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

NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
	UNKNOWN HYDROCARBON	13.56	19	NJ
	UNKNOWN HYDROCARBON	18.88	8	NJ
	UNKNOWN	22.42	16	NJ
	Trimethylbenzene Isomer	22.80	8	NJ
	UNKNOWN ALKYLATED BENZENE	23.61	7	NJ
	UNKNOWN	24.14	9	NJ
	UNKNOWN	24.75	10	NJ

FORM I VOA-TIC

3/90

E-179

84

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SS-1

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

rix: (soil/water) SOIL

Lab Sample ID: 68862

ple wt/vol: 5.0 (g/mL) G

Lab File ID: F2821

el: (low/med) LOW

Date Received: 08/06/93

oisture: not dec. 6

Date Analyzed: 08/14/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

l Extract Volume: (uL)

Soil Aliquot Volume: (uL)

mber TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	20.94	6	N/J
2.	UNKNOWN	22.39	15	N/J
3.	UNKNOWN	24.16	6	N/J
4.	UNKNOWN HYDROCARBON	24.77	28	N/J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SS-2

e: E & E INC.

Contract:

e: EAND E

Case No.: 702

SAS No.:

SDG No.: SD-1

(soil/water) SOIL

Lab Sample ID: 68863

wt/vol: 5.0 (g/mL) G

Lab File ID: F2822

(low/med) LOW

Date Received: 08/06/93

ure: not dec. 27

Date Analyzed: 08/14/93

mn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

tract Volume: (uL)

Soil Aliquot Volume: (uL)

TICs found: 2

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

NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
	UNKNOWN	22.41	33	NJ
	UNKNOWN OXY. HYDROCARBON	24.79	30	NJ

FORM I VOA-TIC

3/90

E-181

120

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SS-3

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

rix: (soil/water) SOIL

Lab Sample ID: 68864

ple wt/vol: 4.9 (g/mL) G

Lab File ID: F2801

el: (low/med) LOW

Date Received: 08/06/93

oisture: not dec. 29

Date Analyzed: 08/14/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

l Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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

mber TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 11-05-43	Hexane	5.60	8	BJN BJN
2.	UNKNOWN	22.41	10	NJ
3.	UNKNOWN	24.11	8	NJ
4.	UNKNOWN	24.82	12	NJ

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

S3-4

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68365

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: F2325

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: not dec. 13

Date Analyzed: 08/14/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

1 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	21.01	17	MJ
2.	UNKNOWN	22.44	41	MJ

FORM I VOA-TIC

3/90

E-183

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SS-5

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68866

Sample wt/vol: 4.9 (g/mL) G

Lab File ID: F2806

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: not dec. 26

Date Analyzed: 08/14/93

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 11-05-43	Hexane	5.58	10	BJN
2.	UNKNOWN	22.39	9	MJ
3.	UNKNOWN	24.09	11	MJ

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SS-6

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) SOIL

Lab Sample ID: 68867

le wt/vol: 5.0 (g/mL) G

Lab File ID: F2826

l: (low/med) LOW

Date Received: 08/06/93

isture: not dec. 9

Date Analyzed: 08/14/93

olumn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

ber TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	20.96	42	N J
2.	UNKNOWN	22.46	31	N J
3.	UNKNOWN	24.19	6	N J
1.	UNKNOWN OXY. HYDROCARBON	24.87	9	N J

FORM I VOA-TIC

3/90

E-185

160

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SS-7

Client Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68868

Sample wt/vol: 5.2 (g/mL) G

Lab File ID: F2808

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: not dec. 26

Date Analyzed: 08/14/93

GC Column: VOCOL 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. 11-05-43	Hexane	5.62	16	BJN

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SW-1

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) WATER

Lab Sample ID: 68851

le wt/vol: 5.0 (g/mL) ML

Lab File ID: D7192

l: (low/med) LOW

Date Received: 08/06/93

isture: not dec.

Date Analyzed: 08/12/93

olumn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

ber TICs found: 0

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

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

E-187

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SW-2

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) WATER

Lab Sample ID: 68852

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D7193

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: not dec.

Date Analyzed: 08/12/93

GC Column: VOCOL 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/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SW-3

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) WATER

Lab Sample ID: 68853

le wt/vol: 5.0 (g/mL) ML

Lab File ID: D7197

l: (low/med) LOW

Date Received: 08/06/93

isture: not dec.

Date Analyzed: 08/12/93

olumn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

ber TICs found: 0

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

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I VOA-TIC

3/90

E-189

201

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC 2012

SW-4

Name: E & E INC.

Contract:

Lab Code: EANDL

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) WATER

Lab Sample ID: 68854

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D7198

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: not dec.

Date Analyzed: 08/12/93

GC Column: VOCOL 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/L

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SW-5

Name: E & E INC.

Contract:

Code: EAND E

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) WATER

Lab Sample ID: 68355RE

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D7221

Level: (low/med) LOW

Date Received: 08/06/93

Disturbance: not dec.

Date Analyzed: 08/12/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SW-5DL

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) WATER

Lab Sample ID: 68355

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D7206

Level: (low/med) LOW

Date Received: 08/06/93

% Moisture: not dec.

Date Analyzed: 08/12/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 10.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	21.50	140	MJ
2.	UNKNOWN	25.46	80	MJ

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

TB-YR

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) WATER

Lab Sample ID: 68856

le wt/vol: 5.0 (g/mL) ML

Lab File ID: D7200

l: (low/med) LOW

Date Received: 08/06/93

isture: not dec.

Date Analyzed: 08/12/93

olumn: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Extract Volume: (uL)

Soil Aliquot Volume: (uL)

umber TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
10-70-40	1-Bromo2-chloroethane	12.09	19	JN
	UNKNOWN	21.51	7	N/J
	UNKNOWN	25.45	6	N/J

FORM I VOA-TIC

3/90

228

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

W-1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68869

Sample wt/vol: 1.1 (g/mL) G

Lab File ID: F2809

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: not dec. 26

Date Analyzed: 08/14/93

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	18.92	3700	N J
2.	UNKNOWN HYDROCARBON	20.18	1100	N J
3.	UNKNOWN HYDROCARBON	20.95	1500	N J
4.	UNKNOWN HYDROCARBON	21.20	2900	N J
5.	UNKNOWN HYDROCARBON	21.50	1600	N J
6.	UNKNOWN	22.00	2200	N J
7.	UNKNOWN HYDROCARBON	22.50	7100	N J
8.	UNKNOWN HYDROCARBON	23.18	2800	N J
9.	UNKNOWN	23.48	1100	N J
10.	UNKNOWN HYDROCARBON	24.19	2100	N J

FORM I VOA-TIC

3/90

241

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS-1

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68862

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E4531

Level: (low/med) LOW

Date Received: 08/06/93

Disturbance: 6 decanted: (Y/N) N

Date Extracted: 08/17/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/23/93

Reaction Volume: 2.0 (uL)

Dilution Factor: 1.0

Cleanup: (Y/N) Y

pH: 7.0

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

Number of TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.50	3000	N/J
2.	UNKNOWN	6.37	41000	N/J
3.	UNKNOWN	8.33	1100	N/J
4.	UNKNOWN	16.74	300	N/J
5.	UNKNOWN HYDROCARBON	18.51	160	N/J
6.	UNKNOWN	19.42	160	N/J
7.	UNKNOWN	20.18	320	N/J
8.	UNKNOWN	21.28	230	N/J
9.	UNKNOWN	26.64	1100	N/J
10.	UNKNOWN	27.09	940	N/J
11.	UNKNOWN	35.44	1200	N/J
12.	UNKNOWN	35.77	1600	N/J
13.	UNKNOWN	36.10	2200	N/J
14.	UNKNOWN	36.24	1100	N/J
15.	UNKNOWN	36.44	2200	N/J
16.	UNKNOWN UNKNOWN	36.73	1700	N/J
17.	UNKNOWN	37.12	1700	N/J
18.	UNKNOWN	37.19	1200	N/J
19.	UNKNOWN	37.50	1100	N/J
20.	UNKNOWN	37.46	1000	N/J

2/29/93

644

FORM I SV-TIC

3/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SS-2

I b Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68863

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E4506

Level: (low/med) LOW

Date Received: 08/06/93

% Moisture: 26 decanted: (Y/N) N

Date Extracted: 08/11/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/20/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 7.8

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

Number TICs found: 17

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.56	4900	N/J
2. 12-34-22	Aldol Condensation Product	6.40	56000	ABJN
3.	UNKNOWN	8.36	900	N/J
4.	UNKNOWN	8.87	130	N/J
5.	UNKNOWN	13.40	90	N/J
6.	UNKNOWN	13.60	110	N/J
7.	UNKNOWN	13.81	110	N/J
8.	UNKNOWN	22.60	130	N/J
9.	UNKNOWN HYDROCARBON	28.55	90	N/J
10.	UNKNOWN HYDROCARBON	31.94	90	N/J
11.	UNKNOWN	32.38	130	N/J
12.	UNKNOWN HYDROCARBON	32.99	90	N/J
13.	UNKNOWN	33.57	110	N/J
14.	UNKNOWN HYDROCARBON	34.95	200	N/J
15.	UNKNOWN OXY. HYDROCARBON	36.24	220	N/J
16.	UNKNOWN HYDROCARBON	38.56	830	N/J
17.	UNKNOWN	42.70	290	N/J

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SS-3

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) SOIL

Lab Sample ID: 68864

le wt/vol: 30.0 (g/mL) G

Lab File ID: E4512

l: (low/med) LOW

Date Received: 08/06/93

isture: 29 decanted: (Y/N) N

Date Extracted: 08/11/93

entrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/20/93

ction Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) Y pH: 8.4

er TICs found: 18

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

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
.	UNKNOWN	4.88	3000	NJ
.	UNKNOWN	5.56	4700	NBJ
. 12-34-22	Aldol Condensation Product	6.39	58000	ABJN
.	UNKNOWN	8.39	330	NBJ
.	UNKNOWN	22.39	470	NJ
.	UNKNOWN HYDROCARBON	23.26	94	NJ
.	UNKNOWN	26.33	120	NJ
. 10-54-4500	Molecular Sulfur	28.07	770	JN
.	UNKNOWN HYDROCARBON	28.53	140	NJ
.	UNKNOWN HYDROCARBON	32.98	300	NJ
.	UNKNOWN HYDROCARBON	33.98	140	NJ
.	UNKNOWN HYDROCARBON	34.95	870	NJ
.	UNKNOWN	36.84	420	NJ
.	UNKNOWN	38.28	630	NJ
.	UNKNOWN HYDROCARBON	38.54	1900	NJ
.	UNKNOWN	40.94	400	NJ
.	UNKNOWN	42.67	1800	NJ
.	UNKNOWN	44.20	580	NJ

FORM I SV-TIC

3/90

E-197

722

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SS-4

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68865

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E4510

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: 50 decanted: (Y/N) N

Date Extracted: 08/11/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/20/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

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

Number TICs found: 10

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.55	3200	N/AJ
2.	UNKNOWN	5.07	500	N/AJ
3. 12-34-22	Aldol Condensation Product	6.37	70000	AJN
4.	UNKNOWN	8.43	200	N/AJ
5.	UNKNOWN	13.58	200	N/AJ
6.	UNKNOWN	22.51	170	N/AJ
7.	UNKNOWN HYDROCARBON	32.99	170	N/AJ
8.	UNKNOWN HYDROCARBON	34.95	270	N/AJ
9.	UNKNOWN	35.89	270	N/AJ
10.	UNKNOWN HYDROCARBON	38.55	730	N/AJ

FORM I SV-TIC

3/90

758

E-198

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SS-5

Name: E & E INC. Contract:
Code: EANDE Case No.: 702 SAS No.: SDG No.: SD-1
Matrix: (soil/water) SOIL Lab Sample ID: 68866
Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4517
Level: (low/med) LOW Date Received: 08/06/93
Moisture: 26 decanted: (Y/N) N Date Extracted: 08/11/93
Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/21/93
Injection Volume: 2.0(uL) Dilution Factor: 1.0
Cleanup: (Y/N) Y pH: 8.4

Number TICs found: 14 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.87	2500	N/J
2.	UNKNOWN	5.49	2900	N/J
3. 12-34-22	Aldol Condensation Product	6.32	38000	ABJN
4.	UNKNOWN	7.49	92	N/J
5.	UNKNOWN	8.34	540	N/J
6.	UNKNOWN	8.47	110	N/J
7.	UNKNOWN	10.21	270	N/J
8.	UNKNOWN	22.45	130	N/J
9.	UNKNOWN HYDROCARBON	36.76	110	N/J
10.	UNKNOWN	37.05	160	N/J
11.	UNKNOWN	37.35	130	N/J
12.	UNKNOWN	38.21	47	N/J
13.	UNKNOWN HYDROCARBON	38.50	220	N/J
14.	UNKNOWN HYDROCARBON	39.16	270	N/J

FORM I SV-TIC

3/90

780

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SS-6

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68867

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E4518

Level: (low/med) LOW

Date Received: 08/06/93

% Moisture: 9 decanted: (Y/N) N

Date Extracted: 08/11/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/21/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

Number TICs found: 13

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.37	110	NJ
2.	UNKNOWN	4.89	580	NJ
3.	UNKNOWN	5.01	880	NJ
4.	UNKNOWN	5.50	1800	NBJ
5. 12-34-22	Aldol Condensation Product	6.32	31000	ABJN
6.	UNKNOWN	8.35	180	NBJ
7.	UNKNOWN	8.47	100	NBJ
8.	UNKNOWN	10.21	260	NJ
9.	UNKNOWN	34.92	91	NJ
10.	UNKNOWN	35.87	73	NJ
11.	UNKNOWN PAH	36.40	220	NJ
12.	UNKNOWN HYDROCARBON	36.77	140	NJ
13.	UNKNOWN HYDROCARBON	38.52	180	NJ

FORM I SV-TIC

3/90

E-200

80

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SS-7

Lab Name: E & E INC.

Contract:

Lab Code: EAND E

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: 68868

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E4519

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: 13 decanted: (Y/N) N

Date Extracted: 08/11/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/21/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

PC Cleanup: (Y/N) Y pH: 7.5

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.85	4600	N/J
2.	UNKNOWN	5.51	1800	N/J
3. 12-34-22	Aldol Condensation Product	6.32	34000	ABJN
4.	UNKNOWN	10.21	570	N/J
5.	UNKNOWN	26.54	760	N/J
6.	UNKNOWN HYDROCARBON	26.66	800	N/J
7.	UNKNOWN ACID	26.82	2300	N/J
8.	UNKNOWN	29.05	760	N/J
9.	UNKNOWN	29.68	1300	N/J
10.	UNKNOWN HYDROCARBON	30.82	610	N/J
11.	UNKNOWN HYDROCARBON	31.38	310	N/J
12.	UNKNOWN	31.48	320	N/J
13.	UNKNOWN HYDROCARBON	31.60	650	N/J
14.	UNKNOWN	31.83	230	N/J
15.	UNKNOWN	33.48	230	N/J
16.	UNKNOWN HYDROCARBON	34.91	380	N/J
17.	UNKNOWN HYDROCARBON	36.76	730	N/J
18.	UNKNOWN HYDROCARBON	38.51	710	N/J
19.	UNKNOWN	40.03	380	N/J
20.	UNKNOWN	40.64	170	N/J

FORM I SV-TIC

3/90

E-201

839

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SW-1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) WATER

Lab Sample ID: 68851

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G3244

Level: (low/med) LOW

Date Received: 08/06/93

% Moisture: decanted: (Y/N)

Date Extracted: 08/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/14/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.9

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 12-34-22	Aldol Condensation Product	2.30	4	ABJN
2.	UNKNOWN	4.20	5	NJ
3.	UNKNOWN	4.53	4	NJ
4.	UNKNOWN	5.15	8	NJ
5.	UNKNOWN	31.45	5	NBJ
6.	UNKNOWN	32.62	4	NBJ
7.	UNKNOWN	34.83	3	NBJ

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SW-2

Name: E & E INC.

Contract:

Code: EAND E

Case No.: 702

SAS No.:

SDG No.: SD-1

rix: (soil/water) WATER

Lab Sample ID: 68852

ple wt/vol: 1000 (g/mL) ML

Lab File ID: G3245

el: (low/med) LOW

Date Received: 08/06/93

loisture: decanted: (Y/N)

Date Extracted: 08/11/93

icentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/14/93

ection Volume: 2.0(uL)

Dilution Factor: 1.0

: Cleanup: (Y/N) Y pH: 8.0

ber TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	30.19	6	BJ
2.	UNKNOWN	30.83	4	BJ
3.	UNKNOWN	31.45	3	BJ
4.	UNKNOWN	32.62	8	BJ
5.	UNKNOWN	34.83	6	BJ
6.	UNKNOWN	36.85	2	J

FORM I SV-TIC

3/90

888

1r
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SW-3

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) WATER

Lab Sample ID: 68853

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G3246

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: decanted: (Y/N)

Date Extracted: 08/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/14/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 12-34-22	Aldol Condensation Product	2.32	12	ABJN

FORM I SV-TIC

3/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SW-4

Name: E & E INC.

Contract:

Code: EAND E

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) WATER

Lab Sample ID: 68854

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G3247

Level: (low/med) LOW

Date Received: 08/06/93

Moisture: decanted: (Y/N)

Date Extracted: 08/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/14/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) Y pH: 9.2

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 12-34-22	Aldol Condensation Product	2.32	10	ABJN
2.	UNKNOWN	30.26	2	M BJ
3.	UNKNOWN	32.63	2	M BJ

FORM I SV-TIC

3/90

E-205

recycled paper

ecology and environment

908

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SW-5

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) WATER

Lab Sample ID: 68855

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G3248

Level: (low/med) LOW

Date Received: 08/06/93

% Moisture: decanted: (Y/N)

Date Extracted: 08/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/14/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 9.2

Number TICs found: 19

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.17	5	N J
2. 12-34-22	Aldol Condensation Product	2.33	10	ABJN
3.	UNKNOWN	4.83	6	N J
4.	UNKNOWN	7.12	2	J
5.	UNKNOWN	7.83	2	J
6.	UNKNOWN	9.13	4	J
7.	UNKNOWN	10.14	2	J
8.	UNKNOWN	10.42	2	J
9.	UNKNOWN OXY. HYDROCARBON	11.12	10	J
10.	UNKNOWN	11.20	2	J
11.	UNKNOWN	12.10	140	J
12.	UNKNOWN	13.19	43	J
13.	UNKNOWN	13.52	60	J
14.	UNKNOWN	13.77	100	J
15.	UNKNOWN	14.63	10	J
16.	UNKNWON	15.62	8	J
17.	UNKNOWN	20.50	8	J
18.	UNKNOWN	22.70	18	J
19.	UNKNOWN	25.15	28	V J

FORM I SV-TIC

3/90

E-206

917

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SW-5RE

b Name: E & E INC.

Contract:

b Code: EAND E

Case No.: 702

SAS No.:

SDG No.: SD-1

trix: (soil/water) WATER

Lab Sample ID: 68855RE

mple wt/vol: 1000 (g/mL) ML

Lab File ID: G3255

vel: (low/med) LOW

Date Received: 08/06/93

Moisture: decanted: (Y/N)

Date Extracted: 08/11/93

ncentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/16/93

jection Volume: 2.0(uL)

Dilution Factor: 1.0

C Cleanup: (Y/N) N pH: 9.2

mber TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.19	3	NJ
2. 12-34-22	Aldol Condensation Product	2.34	8	ABJN
3.	UNKNOWN	3.48	14	MJ
4.	UNKNOWN	4.84	4	J
5.	UNKNOWN	9.12	8	J
6.	UNKNOWN	10.39	6	J
7.	UNKNOWN	11.05	10	J
8.	UNKNOWN	11.44	8	J
9.	UNKNOWN	12.09	110	J
10.	UNKNOWN	12.30	12	J
11.	UNKNOWN	13.11	60	J
12.	UNKNOWN	13.37	30	J
13.	UNKNOWN	13.69	70	J
14.	UNKNOWN	13.77	10	J
15.	UNKNOWN	14.61	7	J
16.	UNKNOWN	15.59	8	J
17.	UNKNOWN	16.08	8	J
18.	UNKNOWN	20.50	20	J
19.	UNKNOWN	22.69	10	J
20.	UNKNOWN	25.14	18	J

FORM I SV-TIC

3/90

E-207

946

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

W-1

Lab Name: E & E INC. Contract: _____

Lab Code: EANDE Case No.: 702 SAS No.: _____ SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 68869

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4520

Level: (low/med) LOW Date Received: 08/06/93

Moisture: 15 decanted: (Y/N) N Date Extracted: 08/11/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/21/93

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	2.97	840	MJ
2.	UNKNOWN	4.38	1000	MJ
3.	UNKNOWN	5.89	5500	MJ
4. 12-34-22	Aldol Condensation Product	6.22	250	ABJN
5.	UNKNOWN	6.34	490	MJ
6.	UNKNOWN	6.86	450	MJ
7.	UNKNOWN	8.01	920	MJ
8.	UNKNOWN	7.65	2300	MJ
9.	UNKNOWN ACID	8.24	920	MJ
10.	UNKNOWN ACID	10.39	350	MJ
11.	UNKNOWN	11.05	840	MJ
12.	UNKNOWN	13.01	230	MJ
13.	UNKNOWN	13.93	98	MJ
14.	UNKNOWN	14.65	160	MJ
15. 10-38-22	Benzeneacetic Acid	15.84	430	MJ
16.	UNKNOWN	16.23	98	MJ
17. 50-15-20	Benzenepropanoic Acid	17.45	1200	MJ
18.	UNKNOWN methyl 1H-Indole	18.24	170	MJ
19.	UNKNOWN	22.40	130	MJ
20.	UNKNOWN	22.50	120	MJ

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SBLKW1

Name: E & E INC. Contract:
 Code: EANDE Case No.: 702 SAS No.: SDG No.: SD-1
 Matrix: (soil/water) WATER Lab Sample ID: SBLKW08-11
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: G3243
 Level: (low/med) LOW Date Received:
 Moisture: decanted: (Y/N) Date Extracted: 08/11/93
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/14/93
 Injection Volume: 2.0(uL) Dilution Factor: 1.0
 Cleanup: (Y/N) N pH:

Number TICs found: 7
 CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 12-34-22	Aldol Condensation Product	2.30	6	AJN
2.	UNKNOWN	27.57	3	MJ
3.	UNKNOWN	30.15	18	MJ
4.	UNKNOWN	30.65	14	MJ
5.	UNKNOWN	31.44	7	MJ
6.	UNKNOWN	32.56	19	MJ
7.	UNKNOWN	34.77	16	MJ

FORM I SV-TIC

3/90

1109

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

SBLKS1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

Matrix: (soil/water) SOIL

Lab Sample ID: SBLKS08-11

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E4493

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N) N

Date Extracted: 08/11/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/20/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH:

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.55	300	N/J
2.	UNKNOWN	5.63	320	N/J
3. 12-34-22	Aldol Condensation Product	6.29	13000	AJN
4.	UNKNOWN	8.39	170	N/J
5.	UNKNOWN	8.52	83	N/J
6.	UNKNOWN	13.60	550	N/J
7.	UNKNOWN	16.79	280	N/J
8.	UNKNOWN	19.64	120	N/J
9.	UNKNOWN	22.19	66	N/J
10.	UNKNOWN	23.51	83	N/J

FORM I SV-TIC

3/90

1123

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLKS2

Name: E & E INC.

Contract:

Code: EANDE

Case No.: 702

SAS No.:

SDG No.: SD-1

ix: (soil/water) SOIL

Lab Sample ID: SBLKS_08-17

le wt/vol: 30.0 (g/mL) G

Lab File ID: E4530

l: (low/med) LOW

Date Received:

isture: decanted: (Y/N) N

Date Extracted: 08/17/93

entrated Extract Volume: 500.0 (uL)

Date Analyzed: 08/23/93

ection Volume: 2.0(uL)

Dilution Factor: 1.0

Cleanup: (Y/N) Y

pH:

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

per TICs found: 13

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.56	4800	M J
2.	UNKNOWN	6.43	48000	J
3.	UNKNOWN	8.32	1600	J
4.	UNKNOWN	13.57	180	J
5.	UNKNOWN	23.48	100	J
6.	UNKNOWN HYDROCARBON	30.82	150	J
7.	UNKNOWN	31.76	120	J
8.	UNKNOWN HYDROCARBON	31.91	200	J
9.	UNKNOWN HYDROCARBON	32.96	170	J
0.	UNKNOWN HYDROCARBON	33.96	150	J
1.	UNKNOWN HYDROCARBON	34.92	180	J
2.	UNKNOWN HYDROCARBON	35.86	66	J
3.	UNKNOWN PAH	36.39	100	J

FORM I SV-TIC

3/90

E-211

1142

APPENDIX F

**SUPPORTING DOCUMENTATION AND
PERTINENT RECORDS**

REFERENCE**PAGE**

Barto 1980	F-3
Buck 1990	F-4
Butkas 1990	F-11
Curreri 1994	F-12
Halstead 1990	F-13
Hunt 1994	F-14
Majesky 1994	F-15
McCarthy 1993	F-17
Morse 1987	F-18
Morse 1989	F-19
Morse 1990	F-20
NYSDEC 1984	F-24
Schmied and Shattuck 1981	F-27
Standard Engineering Corporation 1979	F-29
Houghtaling 1993	F-32

BASIC FIELD INCIDENT REPORT

Fill In This Report
In Your Own Words

Fire Department Code

5, I, O, I, 7

☐ Revised Report

1	Incident No.	Exp. No.	Mo.	Day	Year	Day of the Week	Alarm Time	Time "In Service"
		9	7	80	Sunday		12:11	17:00
CORRECT ADDRESS:		No.	Dir.	Name	Type	Zip Code	Census Tract	
				RD # 1 Painted Post		14870		
Occupant Name					Telephone		Room or Apt.	
Steuben County Landfill					na		na	
Owner Name				Address		Telephone		
Town Of Erwin				Painted Post N. Y.		na		
Method of Alarm from Public					Type of Situation Found			
Telephone					Burning waste at landfill			
Type of Action Taken					Co. Inspection District	Shift	No. Alarms	Mutual Aid
Extinguishment							3	☒ Rec'd ☐ Given
No. Fire Service Personnel Used at Scene		No. Engines Used at Scene		No. Aerial Apparatus Used at Scene		No. Other Vehicles Used at Scene		
130				0		13		

COMPLETE ON ALL INCIDENTS

2	No. Incident-related Injuries*		No. Incident-related Fatalities*		Structure Type	
	Fire Service	18	Others	10	Fire Service	10
					Others	10
Fixed Property Use			Complex		Mobile Property Type**	
Landfill						
Area of Fire Origin		Level of Fire Origin		Construction Type		Construction Method
center of area		grade		na		na

COMPLETE IF CASUALTY OR FIRE

Equipment Involved in Ignition (if any)**		Form of Heat of Ignition	
na		Form undetermined	
Type of Material Ignited		Form of Material Ignited	
Food & Paper		Waste	
		Ignition Factor	
		Suspicious	

IGNITION

Extent of Flame Damage		IF FLAME SPREAD BEYOND ROOM OF ORIGIN:	Type of Material Generating Most Flame	Avenue of Flame Travel
na			wood & paper	na
Extent of Smoke Damage		IF SMOKE SPREAD BEYOND ROOM OF ORIGIN:	Type of Material Generating Most Smoke	Avenue of Smoke Travel
na			Waste materials	na
Extent of Water Damage		Extent of Fire Control Damage	Termination Stage	
na		na	Flame	

COMPLETE IF FIRE GROWTH

Time from Alarm to Agent Application		Method of Extinguishment		Detector Performance	
8 to 10 min.		water		na	
Estimated Total Dollar Loss		Property Damage Classification		Sprinkler Performance	
na		na		na	

COMBAT

* Collected by the National Fire Data System

* List name, age, sex, and description of injury for each casualty on form 902G.

**Complete Line S and/or T

R

Officer in Charge (Name, Position, Assignment)

Thomas Barto

Chief

Date

9-15-80

Member Making Report (If Different from Above)

DEC 4 1980

Date

DEC 4 1980

COMPLETE ON ALL

3	If Mobile Property	Year	Make	Model	Serial No.	License No. (if any)
4	If Equipment Involved in Ignition	Year	Make	Model	Serial No.	Voltage (if any)

F3

**BUCK ENVIRONMENTAL
LABORATORIES, INC.**

ACCREDITED ENVIRONMENTAL ANALYSIS

100 TOMPKINS ST. • CORTLAND, N.Y. 13045
607-753-3403

RECEIVED APR 20 1990

April 24, 1990

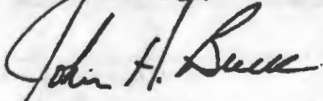
Mr. Lynn Morse
Supervisor
Town of Erwin
117 West Water Street
Painted Post, New York 14870

Dear Mr. Morse:

Enclosed are the analytical results of your well water. We found the water to be relatively clean although low levels of some phthalates were observed. Phthalates are used as industrial plasticizers and may be from plastic piping or may be actual water contaminants.

Please let me know if we can be of further assistance.

Sincerely,



John H. Buck, P.E.
Laboratory Director

*C/O of cover letter to Board 5/1/90
ADVISE IF YOU WANT A COPY OF THE
COMPLETE ANALYSIS
C/O of Report to Tom Kocet Dec 5-4-90*

LABORATORY REPORT

Client: Town of Erwin
117 West Water Street
Painted Post, NY 14870
Site: Well at WWTP
Matrix: Water
Extr. Meth: Sep. Funnel

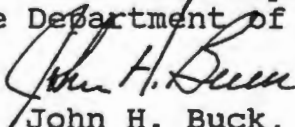
Report Date: 4/16/90
Sampling Date: 3/19/90
Sampled By: F. Curreri
Extr. Date: 3/25/90
Analysis Date: 4/05/90
Lab Log No: N900551

PESTICIDES AND PCB'S
(By EPA 608 GC/MS Methodology)

CAS No.	COMPOUND	DL	RESULT
309-00-2	Aldrin	.05	ND
319-84-6	Alpha-BHC	.05	ND
319-85-7	Beta-BHC	.05	ND
319-85-8	Delta-BHC	.05	ND
58-89-9	Gamma-BHC (Lindane)	.05	ND
57-74-9	Chlordane	.50	ND
72-54-8	4,4'-DDD	.10	ND
72-55-9	4,4'-DDE	.10	ND
50-29-3	4,4'-DDT	.10	ND
60-57-1	Dieldrin	.10	ND
959-98-8	Endosulfan I	.05	ND
33213-65-9	Endosulfan II	.10	ND
1031-07-8	Endosulfan Sulphate	.10	ND
72-20-8	Endrin	.10	ND
53494-70-5	Endrin Aldehyde	.10	ND
76-44-8	Heptachlor	.05	ND
1024-57-3	Heptachlor Epoxide	.05	ND
72-43-5	Methoxychlor	.50	ND
8001-35-2	Toxaphene	1.0	ND
12674-11-2	PCB 1016	0.5	ND
11104-28-2	PCB 1221	0.5	ND
11141-16-5	PCB 1232	0.5	ND
53469-21-9	PCB 1242	0.5	ND
12672-29-6	PCB 1248	0.5	ND
11097-60-1	PCB 1254	1.0	ND
11096-82-5	PCB 1260	1.0	ND

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.


John H. Buck, P.E.
Laboratory Director

LABORATORY REPORT

Client: Town of Erwin
117 West Water Street
Painted Post, NY 14870
Site: Well at WWTP
Sample: Potable Water

Report Date: 4/16/90
Sampling Date: 3/19/90
Sampled By: F. Curreri
Analysis Date: 3/27/90
Lab Log No: N900551

**HAZARDOUS SUBSTANCES LIST COMPOUNDS
(By EPA 624 GC/MS Methodology)**

CAS No.	Compound	DL	RESULT
75-27-4	bromodichloromethane	5	ND
75-25-2	bromoform	5	ND
74-83-9	bromomethane	10	ND
56-23-5	carbon tetrachloride	5	ND
108-90-7	chlorobenzene	5	ND
75-00-3	chloroethane	10	ND
100-75-8	2-chloroethylvinylether	10	ND
67-66-3	chloroform	5	ND
74-87-3	chloromethane	10	ND
124-38-1	dibromochloromethane	5	ND
95-50-1	1,2-dichlorobenzene	5	ND
541-73-1	1,3-dichlorobenzene	5	ND
106-46-7	1,4-dichlorobenzene	5	ND
75-71-8	dichlorodifluoromethane	5	ND
75-34-3	1,1-dichloroethane	5	ND
107-06-2	1,2-dichloroethane	5	ND
75-35-4	1,1-dichloroethene	5	ND
156-60-5	trans-1,2-dichloroethene	5	ND
78-87-5	1,2-dichloropropane	5	ND
10061-01-5	cis-1,3-dichloropropene	5	ND
10061-02-6	trans-1,3-dichloropropene	5	ND
75-09-2	methylene chloride	5	ND
79-34-5	1,1,2,2-tetrachloroethane	5	ND
127-18-4	tetrachloroethene	5	ND
71-55-6	1,1,1-trichloroethane	5	ND
79-00-5	1,1,2-trichloroethane	5	ND
79-01-6	trichloroethene	5	ND
75-69-4	trichlorofluoromethane	5	ND
75-01-4	vinyl chloride	10	ND

Continued on Page 2

LABORATORY REPORT

Client: Town of Erwin
117 West Water Street
Painted Post, NY 14870
Site: Well at WWTP
Sample: Potable Water

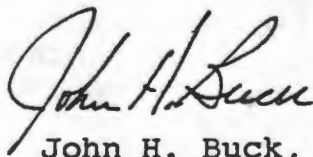
Report Date: 4/16/90
Sampling Date: 3/19/90
Sampled By: F.Curreri
Analysis Date: 3/27/90
Lab Log No: N900551

HAZARDOUS SUBSTANCES LIST COMPOUNDS
(EPA 624 GC/MS Methodology)

CAS No.	Compound	DL	RESULT
71-43-2	benzene	5	ND
100-41-1	ethylbenzene	5	ND
108-88-3	toluene	5	ND
541-73-1	1,3-dichlorobenzene	5	ND
95-50-1	1,2-dichlorobenzene	5	ND
106-46-7	1,4-dichlorobenzene	5	ND
1330-20-7	xylene (m, o, & p)	5	ND
67-64-1	acetone	100	ND
75-15-0	carbon disulfide	100	ND
78-93-3	2-butanone	100	ND
108-05-4	vinyl acetate	50	ND
108-10-1	4-methyl-2-pentanone	50	ND
591-78-6	2-hexanone	50	ND
100-42-5	styrene	5	ND
Additional Compounds			
1,1,2trichloro-1,2,2trifluoroethane			ND
MTBE			ND

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.



John H. Buck, P.E.
Laboratory Director

LABORATORY REPORT

Client: Town of Erwin
117 West Water Street
Painted Post, NY 14870

Site: Well at WWTP
Extr. Meth: Sep. Funnel
Matrix: Water

Report Date: 4/24/90
Sampling Date: 3/19/90
Extr. Date: 3/25/90
Sampled By: F. Curreri
Analysis Date: 4/20/90
Lab Log No: N900551

PRIORITY POLLUTANT LIST COMPOUNDS
(By EPA 8270 GC/MS Methodology)

CAS No.	COMPOUND	DL	RESULT
83-32-9	Acenaphthene	5	ND
208-96-8	Acenaphthylene	5	ND
120-12-7	Anthracene	5	ND
92-87-5	Benzidene	50	ND
56-55-3	Benzo(a)anthracene	10	ND
50-32-8	Benzo(a)pyrene	5	ND
205-99-2	Benzo(b)fluoranthene	5	ND
191-24-2	Benzo(ghi)perylene	5	ND
207-08-9	Benzo(k)fluoranthene	5	ND
85-68-7	Benzyl butyl phthalate	5	ND
111-91-1	Bis(2-chloroethoxy)methane	10	ND
111-44-4	Bis(2-chloroethyl)ether	10	ND
39638-32-9	Bis(2-chloroisopropyl) ether	10	ND
117-81-7	Bis(2-ethoxyethyl)phthalate	5	19.7
101-55-3	4-Bromophenylphenyl ether	5	ND
59-50-7	4-chloro-3-methylphenol	5	ND
91-58-7	2-Chloronaphthalene	5	ND
95-57-8	2-Chlorophenol	5	ND
7005-72-3	4-Chlorophenyl phenyl ether	5	ND
218-01-9	Chrysene	5	ND
53-70-3	Dibenzo(a,h)anthracene	5	ND
95-50-1	1,2-Dichlorobenzene	5	ND
541-73-1	1,3-Dichlorobenzene	5	ND
106-46-7	1,4-Dichlorobenzene	5	ND
91-94-1	3,3'-Dichlorobenzidine	20	ND
120-83-2	2,4-Dichlorophenol	5	ND
84-66-2	Diethyl phthalate	5	150.7
105-67-9	2,4-Dimethylphenol	5	ND
131-11-3	Dimethyl phthalate	5	ND
84-74-2	Di-n-butyl phthalate	5	ND
117-84-0	Di-n-octyl phthalate	5	ND
51-28-5	2,4-Dinitrophenol	50	ND
121-14-2	2,4-Dinitrotoluene	10	ND

Continued on Page 2

LABORATORY REPORT

Client: Town of Erwin
117 West Water Street
Painted Post, NY 14870

Site: Well at WWTP
Extr. Meth: Sep. Funnel
Matrix: Water

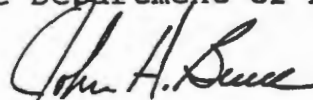
Report Date: 4/24/90
Sampling Date: 3/19/90
Extr. Date: 3/25/90
Sampled By: F. Curreri
Analysis Date: 4/20/90
Lab Log No: N900551

PRIORITY POLLUTANT LIST COMPOUNDS
(EPA 8270 GC/MS Methodology)

CAS No.	COMPOUND	DL	RESULT
606-20-2	2,6-Dinitrotoluene	5	ND
206-44-0	Fluoranthene	5	ND
86-73-7	Fluorene	5	ND
118-74-1	Hexachlorobenzene	5	ND
87-68-3	Hexachlorobutadiene	5	ND
77-47-4	Hexachlorocyclopentadiene	5	ND
67-72-1	Hexachloroethane	5	ND
193-39-5	Indeno(1,2,3-c,d)pyrene	5	ND
78-59-1	Isophorone	5	ND
534-52-1	2-Methyl-4,6-dinitrophenol	25	ND
91-20-3	Naphthalene	5	ND
98-95-3	Nitrobenzene	5	ND
88-75-5	2-Nitrophenol	5	ND
100-02-7	4-Nitrophenol	5	ND
62-75-9	n-Nitrosodimethylamine	5	ND
621-64-7	n-Nitrosodi-n-propylamine	5	ND
86-30-6	n-nitrosodiphenylamine	5	ND
87-86-5	Pentachlorophenol	5	ND
85-01-8	Phenanthrene	10	ND
108-95-2	Phenol	5	ND
129-00-0	Pyrene	5	ND
120-82-1	1,2,4-Trichlorobenzene	5	ND
88-06-2	2,4,6-Trichlorophenol	5	ND

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.



John H. Buck, P.E.
Laboratory Director

Report Date: 4/24/90

Lab Log Number: N900551

LABORATORY REPORT

Client: Town of Erwin
117 West Water Street
Painted Post, New York 14870

Site: Well at WWTP

Sample Date: 3/19/90 by F. Curreri

Sample Description: Water

**CYANIDE
RESULTS**

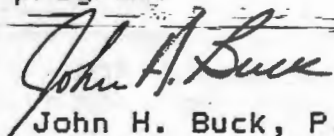
Cyanide

ND (<.010 mg/L) *

ND - None detected greater than detection limit noted.

* - Cyanide observed below formal detection limit.

This analysis is certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.



John H. Buck, P.E.
Laboratory Director

NYS ELAP CERT 10795

March 1 / f.l.
Erwin from Landfill

New York State Department of Environmental Conservation
6274 East Avon-Lima Road, Avon, NY 14414



Thomas C. Jorling
Commissioner

December 26, 1990

Maureen E. Norton, P.E.
Sniedze Associates
343 North Main Street
Canandaigua, NY 14424

Dear Ms. Norton:

Re: Proposed Heliport Landing Area
Erwin (T), Steuben (C)

Section 375.9 of the nullified 375 Regulation required a sixty-day notification prior to initiation of any substantial change of use as defined at the site. Approval or disapproval of site use was only required at sites where the Commissioner of Health has issued a declaration into that effect. ~~For this site, and in the absence of a site investigation, you should be aware, that future investigations may require the removal of such a pad if it interferes with remediating the site.~~

~~Given this condition, you may proceed with the project.~~

Sincerely,

Albert W. Butkas
Regional Permit Administrator
Regulatory Affairs

mm

cc: Town Supervisor
Mike Khalil ✓

RECEIVED
DEC 8 1990
HAZ. WASTE REM.
D.E.C. REG. #8

LU ENGINEERS

Memorandum

Project No./Name: 10606-04/ Erwin Town Landfill
Date: 3-30-94
Contact: Frank Curreri
Phone: (607) 962-3483
Time: 1315
Representing: Town of Erwin Water Department

TELEPHONE CONVERSATION

Discussion in reference to the location of the Town of Erwin's water supply wells:

According to Frank Curreri, the Town has 2 wells; one is located approximately 0.25 miles west of the Holiday Inn and the other is located 0.25 miles west of Route 15, along Route 417.

cc: _____

SIGNED: _____

Jan D. McKel

SOUTHERN ANALYTICAL

509 Cayuta Avenue, Waverly, New York 14892
phone 607-565-9624

Date Sample Taken 1/18/90

Date Sample Received 1/18/90

Collected By client

CLIENT Town of Erwin Painted Post, NY 14870		SAMPLE Tap Water Treatment Plant				
PHYSICAL TESTS						
Conductivity	microsiemens/cm.					
Total Solids	mg/L					
Suspended Solids	mg/L					
Dissolved Solids	mg/L					
METALS						
Cadmium	mg/L	<0.01				
Chromium	mg/L	<0.01				
Copper	mg/L	0.01				
Lead	mg/L	<0.01				
Nickel	mg/L	<0.01				
Zinc	mg/L	0.05				
Mercury	mg/L	<0.0004				
Arsenic	mg/L	<0.002				
INORGANIC NON-METALS						
Alkalinity	mg/L as CaCO ₃					
Chloride	mg/L					
Cyanide, Total	mg/L					
Fluoride	mg/L					
Ammonia Nitrogen	mg/L as N					
Kjeldahl Nitrogen	mg/L as N					
Nitrate Nitrogen	mg/L as N	0.3				
Nitrite Nitrogen	mg/L as N					
pH						
Phosphate, Total	mg/L as P					
ORGANIC CONSTITUENTS						
B.O.D. 5	mg/L					
C.O.D.	mg/L					
Grease and Oil	mg/L					
Surfactants or MBAS	mg/L					
Total Organic Carbon	mg/L					
<i>TOTAL COLIFORM</i>		<i>9.2</i>				

All methods used in determining the above parameters are in compliance with those methods approved by the USEPA as listed in the Federal Register Vol. 44 No. 244 unless otherwise indicated.

WP-5

F-13

ecology and environment

A. O. Halstead

Director

LU ENGINEERS

Memorandum

Project No./Name: 10606-04/Erwin Town Landfill
Date: 3-30-94
Contact: Donald Hunt
Phone: (607) 962-8724
Time: 1300
Representing: Supervisor, Village of Painted Post

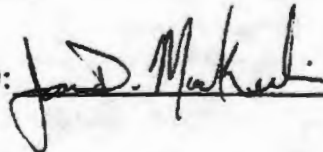
TELEPHONE CONVERSATION

Discussion in reference to the Village of Painted Post water supply well locations:

According to Donald Hunt the Village has 4 wells, three of which are active. Well #1 is inactive. Well #2 located at the intersection of Fairview Avenue and Steuben Street Extension. Well #3 is located at the west end of Craig Park. Well #4 is located within the small park at West High Street and Maple Avenue.

Recommended that I call Frank Curreri at the Town of Erwin and Ron Lajefski at the City of Corning for additional municipal water well information.

cc: _____

SIGNED: 



FACSIMILE COVER SHEET

DATE SENT: 3/30/94
TO: JOSEPH LU ENGINEERS *ATTN: JIM MACKEGEMIE
FAX #: 716-377-1266
FROM: RON MAJESEY
COVER PAGE PLUS: 1
REFERENCE: _____

WELL SITE LOCATION MAP

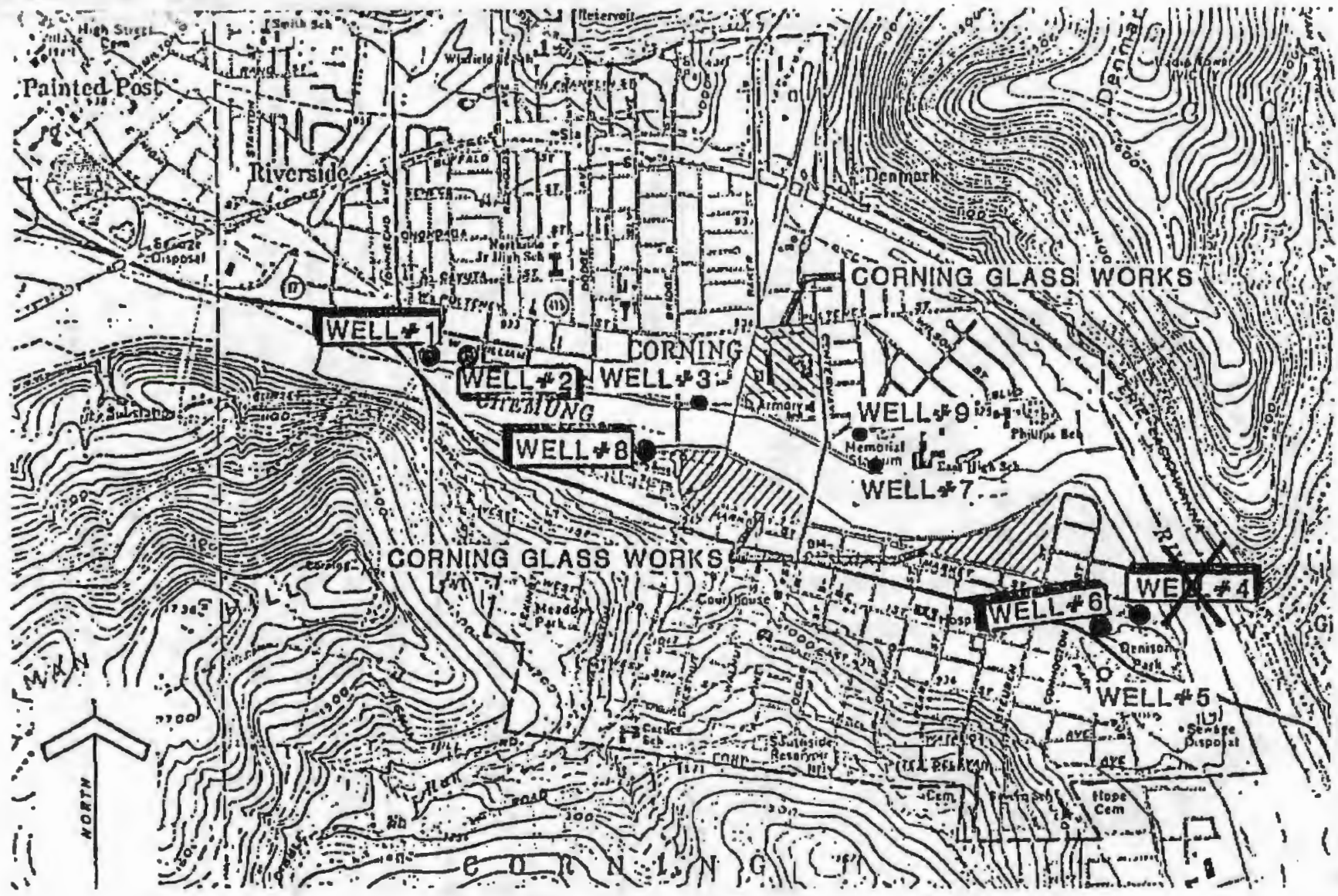
* NOTE: WELL #8A HAS STRIPPING FACILITY FOR VOC'S
WELLS #1 & #2 SCHEDULED FOR STRIPPING BY MID 1995
WELLS #1 & #2, #5, #10 OUT OF SERVICE (TCE CONTAMINATION)
WELLS #3, #7, #9, #8A OPERATIONAL

CITY OF CORNING

TELEPHONE - (607) 962-0721

FAX NO. - (607) 937-3358

F-16



**MALCOLM
PIRNIE**

CITY OF CORNING, NEW YORK
WELL LOCATION MAP

MALCOLM PIRNIE, INC.

FIGURE 2-1



LU ENGINEERS
Civil and Environmental

RECEIVED NOV 15 1993

November 10, 1993

Town of Erwin Supervisor
117 W. Water Street
Painted Post, New York 14870

Re: History/Contents of Abandoned Drums at Erwin Landfill

Dear Mrs. McCarthy:

The purpose of this letter is to confirm the information I obtained from you and Mr. Houghtaling, the highway superintendent, in telephone conversations on November 10th and 2nd, respectively.

My understanding is that you are not aware of any information concerning the contents or age of the drums. Based on their location you speculate that they may have been illegally abandoned at the site by someone after the landfill was closed (1983), but before the area was secured with a gate. Steuben County leased the landfill from the Town of Erwin from 1978 to 1983, but you do not believe that the current Steuben County officials would have information about the drums because they were not in their current positions at that time.

If the above information agrees with your account, please sign this letter below and return it to Lu Engineers in the pre-addressed envelope provided. If you come across any other information on the drums or would like to clarify the description I provided above, feel free to write in corrections or add information in the comment space below. Thank you for your continued assistance.

Sincerely,

Gregory L. Sinton

Gregory L. Sinton

cc: Rick Watt, Ecology & Environment
File 10606-04

Rita McCarthy

Rita McCarthy, Town of Erwin Supervisor

11/15/93

Date

COMMENTS:

F-17

JOSEPH C. LU, P.E., P.C.
2230 PENFIELD ROAD PENFIELD, NEW YORK 14526
TELEPHONE (716) 377 1450 FAX: (716) 377 1266

recycled paper

ecology and environment

Printed on recycled paper

TOWN JUSTICES
DAVID A. JOHNSON
ALBERT H. MILLS

HIGHWAY SUPT.
HOWARD J. HOUGHTALING
(607) 962-0821

18 days

Town of Erwin

PAINTED POST, N.Y. 14870

LYNN J. MORSE, SUPERVISOR
(607) 962-7021

COUNCILMEN
FRANK C. ACOMB
DAVID ERWIN
NELLO L. MARTINI
ROBERT C. WYLIE

TOWN CLERK
MONNA C. TREADWELL
(607) 936-3652

June 30, 1987

JUL 6 1987

Mr. Eric Seiffer
Regional Director
NYS Department of
Environmental Conservation
6274 East Avon-Lima Road
Avon, NY 14414

Dear Eric:

This letter is in reference to the former industrial landfill, south-east of the Painted Post Traffic Circle in the Town of Erwin.

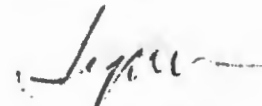
You may recall that this site was leased to Steuben County by the Town for 99 years, or until such time as it could no longer be used as a landfill. The landfill is closed and we are in the process of terminating the lease.

We have been approached by a party interested in establishing a heliport with associated recreational development on the top of the "mound." The Town Board has informally endorsed the concept. Their thinking is (1) such an operation could turn the site from a liability to a functional asset, and (2) it might help to reverse the image that many people have about landfills.

At your earliest convenience, would you please advise us of procedures and/or instructions that DEC might have for such a facility.

We appreciate your assistance.

Sincerely,



Lynn J. Morse
Town Supervisor

mk

RECEIVED

JUL 9 1987
SOLID WASTE
D.E.C. REG. #8.



1/11157.4

RECRA ENVIRONMENTAL, INC.

Chemical Waste Analysis, Prevention and Control

March 16, 1989

Mr. Lynn Morse
Town Supervisor
Erwin Town Hall
Painted Post, NY 14870

Dear Mr. Morse:

As I mentioned during our telephone conversation on March 15, 1989, Recra Environmental, Inc. is currently conducting a Phase I investigation of the Erwin Town Landfill located off Canada Road, Town of Erwin, New York.

We are performing this investigation for the New York State Department of Environmental Conservation pursuant to the requirements of the New York State Superfund Law (Chapter 857 of the Laws of 1982).

This is to confirm our telephone conversation wherein you provided the following information:

- The site is bordered on the north by a flood protection dike from the Cohocton River, on the south by the New York State Department of Transportation interchange, on the east by Conrail tracks, and on the west by Interstate 15. A flood protection dike is also located on the east site (Tioga River).
- The approximate size of the landfill is ~~just over~~ 13 acres.
- A partial fence with a lockable gate extends along the western boundary of the landfill. The facility is not completely fenced, however.
- Final cover depth of the landfill is 2 feet.
- The landfill is not lined; there is no leachate collection system present; and, no diversion system for surface water runoff present.
- Four drums which were observed on-site during a previous site inspection (by NUS Corporation in November, 1987) most likely contained highway supplies. The large tank on-site is currently empty, and was empty at the time of acquisition by the Town.
IN 1978
- The landfill had been owned and operated by the Town of Erwin until the mid 1970's, ~~at which time~~ the Town leased the facility to the County (Steuben). Steuben County operated the facility until its closure in 1983.

F-19

March 16, 1989

- The only known industrial waste disposers include Corning Glass and Ingersoll-Rand. No illegal dumping is known to have occurred.
- Regarding the sampling information which you provided pertaining to the telephone company manhole in proximity to the site, the water sample is not from a groundwater well; rather it is a ponded water sample.
- Regarding the sampling information on the sewage treatment plant well water sample, only bacteria analysis was performed; no chemical analysis for organic compounds or metals was performed to your knowledge.
- The Morningside Heights Water District uses 2 wells, located on the enclosed map, as its source of water. This municipal water system serves the population within the Town of Erwin only, and includes mostly those residences in the Gang Mills area. Within a 3-mile radius of the site, the remainder of the population of the Town of Erwin (outside of the Village of Painted Post and Riverside Corporate limits) use private wells as their source of potable water.
- Within the Town of Erwin, surface water use of the Tioga River consists of recreational purposes, including fishing, boating and swimming, although there are no designated areas for such activities. There are no surface water intakes from the Tioga River for drinking water or irrigation within the Town of Erwin.

We would appreciate if you would review this information, note any necessary corrections and return a signed and dated copy to indicate your concurrence. In addition, we request information indicating the depth (greatest) of waste disposal in the landfill. Your prompt attention to this would be appreciated, as the information is necessary to complete our evaluation of the site. Thank you for your assistance.

Sincerely,

RECRA ENVIRONMENTAL, INC.

Linda J. Clark

Linda J. Clark
Project Geologist

I agree with the information as it is presented.

Lynn Morse
Lynn Morse

3/27/89
Date



SUPERVISOR
Frank A. M...
(716) 936-1000

MANAGER
Frank A. M...
Joe Martin
Joe, Board
Joe, Board

CLERK
John Crenley
(716) 936-1000

ATTORNEY
Frank Engst
(716) 936-1000

DEPUTY
Frank A. M...
Joe Martin

MANAGER
Frank A. M...
Joe Martin

ASSISTANTS
Frank A. M...
Joe Martin
Joe, Board

DEV. DEPT.
INSPECTION
ENFORCEMENT
(716) 936-1000

WATER
WORKS

RECEIVED

October 19, 1990

OCT 22 1990

NYS DEPT. OF ENVIRONMENTAL
CONSERVATION REGIONAL
REGIONAL DIRECTOR

NYS Department of Environmental Cons.
Peter Bush, Director
6274 E. Avon-Lima Road
Avon, New York 14414

Dear Mr. Bush:

Some time ago the Town of Erwin wrote DEC relative to the possibility of establishing a heliport on the closed and inactive industrial landfill in the Town.

More recently, the Town of Erwin made formal application to the Federal Aviation Administration for such a heliport. The FAA advises that we should contact any agency having regulations/requirements which may effect our plans. This letter is for that purpose.

The proposed site is very near the intersection of {2} arterial highways, the East-West Route 17 and the North-South Route 15. We see this as an ideal site for medical helicopters to connect with land ambulances. This immediate need is one reason for our application.

Having such a facility will also be conducive to attracting new business to the area while serving industrial/commercial entities already here.

Lastly, we think a heliport will help erase the negative image the general public has about landfills. Putting a perceived liability to a positive, purposeful use can be an indication that all landfills are not bad.

A paved landing area with appropriate ground lighting should not disturb the site in an adverse way. This is the extent of construction we anticipate.

We are aware that the landfill is in process of review, but we remain optimistic that the results will not change the classification.

Kindly review this proposal and advise of any regulations/
requirements DEC has which may come into play.

Very truly yours,
TOWN OF ERWIN

Lynn J. Morse
Supervisor

bt

50 WOLF ROAD
ALBANY, NEW YORK 12233

PLEASE COMPLETE AND RETURN TO THE ABOVE ADDRESS, ATTENTION: RTK PROCESSING UNIT, ROOM 525

PLEASE ANSWER THE FOLLOWING QUESTIONS:

CHECK ONE

G0813387

- ☒
- YES

☐ NO

2. HAS THE FACILITY AT THIS LOCATION CHANGED ITS NAME OR IDENTIFICATION BECAUSE THERE WAS A CHANGE IN OWNERSHIP, CORPORATE NAME OR OPERATOR NAME, ETC. IF YES LIST THE NAMES BY WHICH THIS FACILITY HAS BEEN IDENTIFIED SINCE JANUARY 1, 1952 TO THE PRESENT.

☐ YES☒ NO

NAME, ADDRESSES, AND TELEPHONE NUMBERS

DATES

3. DESCRIBE THE DOCUMENTS FROM WHICH DATA THAT IS INCLUDED ON PART-II WAS OBTAINED (SEE INSTRUCTIONS).

EPA - Notification of Hazardous Waste Site

6/8/81

DOCUMENT DESCRIPTION

DATES

4. I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT INFORMATION SUPPLIED IS TRUE AND COMPLETE. FALSE STATEMENTS SUBMITTED ON THIS DOCUMENT ARE PUNISHABLE PURSUANT TO SECTION 210.45 OF THE PENAL LAW.

Blake D. Manuel, Sr. Environmental Control Engineer

August 31, 1984

NAME OF OWNER/OPERATOR, PARTNER OFFICER OR AUTHORIZED REPRESENTATIVE

[illegible]

Robert M. Munn

SIGNATURE

607 974-6204

BUSINESS PHONE

NAME Corning Glass Works		ICS NUMBER - EPA ID NUMBER see cover sheet	
ADDRESS HP ME 3 F7			
CITY Corning	STATE NY	ZIP 14831	

GENERATOR FORM

PART - II



DATE August 31, 1984

1. HAZARDOUS WASTE DISPOSAL SITE (SEE INSTRUCTIONS)	2. DESCRIPTION OF HAZARDOUS WASTES DEPOSITED AT THIS LOCATION (SEE INSTRUCTIONS)	3. EPA WASTE CODE	4. WASTE DISPOSED OF QUANTITY OF WASTE (TONS)	FORM LIQUID SOLID DRUMS	5. WASTE DISPOSAL DATES	6. TRANSPORTER OF HAZARDOUS WASTE (SEE INSTRUCTIONS)
Allen Dump Baily Creek Road South Corning, NY 14830	Inorganics Solvents Heavy Metals Waste Oils	D004 thru D011	Hundreds (Estimate)	X X	1953 thru June, 1978	Transportation Dept. Corning Glass Works 8A-221
Steuben County Landfill Lindley, NY	Inorganics Heavy Metals	D004 thru D011	Tens (Estimate)	X	1978 thru 1980	Transportation Dept. Corning Glass Works
Town of Erwin Landfill Erwin, NY 14830	Inorganics Heavy Metals	D004 thru D011	Tens (Estimate)	X	1978 thru 1980	Transportation Dept. Corning Glass Works

R I K - P R O G R A M
REPORTED HAZARDOUS WASTE DATA LISTED BY
REGION - SITE CODE - WASTE TYPE

PAGE - 175

SITE DESCRIPTION: WATERLOO LANDFILL, STEEL RD, WATERLOO NY 13165
***** SITE CODE: 8-50-502 T

WASTE DESCRIPTION	QUANTITY U	L S D	GENERATOR NAME	ID
WASTE PAINT FLAMMABLE LIQUIDS	20.00 T	X - X	HARTMAN MATERIAL HANDLING SYSTEMS	0XB00345

SITE DESCRIPTION: UNKNOWN
***** SITE CODE: 8-51-000 U

WASTE DESCRIPTION	QUANTITY U	L S D	GENERATOR NAME	ID
PCB CAPACITORS, RAGS AND OTHER DEBRIS CONTAMINATED W/ PCBs	0.18 T	- X X	NEW YORK STATE ELECTRIC & GAS COR	00B13427

SITE DESCRIPTION: EDWARD ALLEN LANDFILL, TOWN OF CORNING, STEUBEN COUNTY
***** SITE CODE: 8-51-001

WASTE DESCRIPTION	QUANTITY U	L S D	GENERATOR NAME	ID
ELECTROPLATING WASTE TREATMENT SLUDGE	63.00 T	X - -	NY WESTINGHOUSE ELECTRIC CORP	00B13338
INORGANICS, SOLVENTS, HEAVY METALS, WASTE OILS		X X -	CORNING GLASS WORKS (MAIN PLT)	00B13387
WASTE TREATMENT PLANT SLUDGE W/ LEAD PHOSPHATE AND CADMIUM	2,387.00 T	X - -	NY WESTINGHOUSE ELECTRIC CORP	00B13338

SITE DESCRIPTION: ERIE-LAKAWANA RR, 1 MORRISON-KNUDSEN DR, HORNELL NY 14843
***** SITE CODE: 8-51-002

WASTE DESCRIPTION	QUANTITY U	L S D	GENERATOR NAME	ID
OIL SLUDGE, SOLVENTS		X X -	MORRISON-KNUDSEN-HORNELL INDUSTRI	0XB01152
OILY SLUDGE, PAINT FILTERS, SOLVENTS		X X -	MORRISON-KNUDSEN-HORNELL INDUSTRI	0XB01152

SITE DESCRIPTION: TOWN OF ERWIN LANDFILL, ERWIN, NY 14830
***** SITE CODE: 8-51-003

WASTE DESCRIPTION	QUANTITY U	L S D	GENERATOR NAME	ID
INORGANICS, HEAVY METALS		X X -	CORNING GLASS WORKS (MAIN PLT)	00B13387

SITE DESCRIPTION: UKHANA LANDFILL, HAMMONDSPORT NY
***** SITE CODE: 8-51-007

WASTE DESCRIPTION	QUANTITY U	L S D	GENERATOR NAME	ID
-------------------	------------	-------	----------------	----

received paper

F-26

copying to file

Paul Schmied
Frank Shattuck
RDA Fire, Town of Erwin, Steuben County

January 2, 1981

This report summarizes the Department's findings regarding the September 7, 1980 fire at the subject site. This episode was of particular concern because eight firemen with the Gang Mill Fire Department had to be treated at Corning Hospital for what was suspected to be toxic emissions.

Materials currently being disposed of at the site include:

CORNING GLASS:

1. Ceramic logs, pumice and cerium oxide
2. Cardboard and paper
3. Pellets, cullets, wood and sawdust
4. Demolition debris
5. Plastic bags (polyvinyl chloride)

INGERSOLL RAND:

1. Foundry sand
2. Silica sand
3. Organic sand and clay binders
4. Refractory washings

STEBEN COUNTY HIGHWAY DEPARTMENT

1. Brush, shrubs, tree stumps, etc.

The fire was located in the area where Corning Glass disposes of their waste. According to Fire Chief Barto's report, the ceramic logs originally suspected of liberating "toxic fumes", were not burned in the fire. Most of the material consumed consisted of cardboard and wood including pallets. According to a representative of Corning Glass, the pallets were not treated with a wood preservative (penta chlorophenol). There is also a possibility that the combustion of plastic bags may have liberated hydrogen chloride. The small amount of residue in the bag was determined to be relatively inert.

Neither the Fire Department or the County Landfill Supervisor were able to determine the cause of the fire. Chief Barto's report lists the cause of the fire as suspicious. (Attached are copies).

Carol Herington contacted the emergency room physician, Dr. Chaim Ben Dashan, at Corning Hospital, who treated the eight firemen that were overcome with smoke and what was originally believed to be toxic fumes. Dr. Ben Dashan described the major symptoms as headache and abdominal cramps. Other symptoms included nausea and skin rash which were gone within a few hours. Blood tests were taken from all eight men, but showed nothing unusual. We also contacted Dr. John Mieczkowski who completed follow-up examinations on three of the firemen. Dr. Mieczkowski also reported that the examinations did not reveal anything unusual.

This matter was discussed with our resident fire department expert, Tom Pearson. Tom indicated that the symptoms reported are common in firemen suffering from smoke inhalation. The rash could be due to heat - chemical rashes usually persist for longer periods.

Based upon reports submitted by the county officials, the fire chief and the attending physicians, we are unable to draw any conclusions as to the origin of the fire or whether the firemen were subjected to "toxic fumes."

As per your September 23, 1980 note to Mr. Clark, I am submitting this report directly to you and assume that you will be forwarding a copy to Myron Crouch and Mr. Seiffer. I suggest that copies also be sent to: John Cherill, Corning Glass; Tom Barto, Fire Chief, Gang Mill; John Stover, Chairman, Highway Commission; and Lynn J. Morse, Supervisor, Town of Erwin.

FES:jmm

cc: Steve Betts ✓
Carol Herington

THE STANDARD ENGINEERING CORPORATION

— CONSULTING ENGINEERS —

SUPERVISION • REPORTS • INSPECTIONS • ANALYSIS • DESIGN

DEMOLITION DEBRIS DISPOSAL SITE
STEUBEN COUNTY DEPARTMENT OF HIGHWAYS
DIVISION OF SOLID WASTE



RECEIVED

FEB 23 1979

SOLID WASTE
D.E.C. REG. #8

1743 WESTERN AVENUE
ALBANY, NEW YORK 12203
518-456-1994



PROJECT DESCRIPTION
DEMOLITION DEBRIS DISPOSAL SITE
STEBEN COUNTY DEPARTMENT OF HIGHWAYS
DIVISION OF SOLID WASTE

The proposed site is located at the confluence of the Tioga and Cohocton Rivers in the Town of Erwin adjacent to the Town's Sewage Treatment Facility. Access to the site is via State Route 17 and U.S. Route 15 to the Gangs Mills Exit, then via Canada Road. The site, owned by the Town of Erwin and leased by Steuben County, comprises approximately fifteen acres and has previously been used as a sanitary landfill and demolition debris disposal site by the Town of Erwin.

Prior to the use of the site as a sanitary landfill in 1966, four feet of foundry sand from the Ingersol Rand Company was placed on original ground as a base. In 1975, in preparation of the "Steuben County Solid Waste Management Study" by Barton, Brown, Clyde & Longuidice, P.C., one soil boring was performed on original ground and the results indicated that ground water was fifteen feet below the surface.

The proposed users of the site are Corning Glass Works, The Ingersol Rand Company and the Steuben County Highway Department. Waste deposited by Steuben County will include small quantities of brush and stumps from County Highway construction. Ingersol Rand's waste is foundry sand which includes: scrap iron, scrap steel, shot blast dust, silica sand, organic sand binders, ferrous and non-ferrous alloys, firebrick, claybinder sand and refractory washes. Occasionally, due to changes in machinery, two or three loads of broken concrete will be deposited in addition to the 75 tons per day maximum of foundry wastes. The NYSDEC, Bureau of Hazardous Waste, lists the binding agent used in Ingersol Rand's processes as being cornstarch. The Corning Glass Works waste will include: ceramic logs, cullet, wood pallets, wood and sawdust, construction debris, including bricks and block, some cardboard and paper, small amounts of grinding wastes composed of pumice and cerium oxide, and small amounts of sand. The total maximum daily wastes estimated by Corning Glass is approximately 325 cubic yards, with 50% of the waste being ceramic logs, and the greater portion of the remainder being construction debris. The quantity of waste is entirely dependent upon production schedules, so the actual daily rate can be expected to be much lower.



On an approximate once-a-week basis, Steuben County will transport to the site either a crawler-loader or crawler-dozer from the Highway Department force and will spread and compact the debris. Large amounts of topsoil are expected to be obtained by Steuben County during construction of a new traffic circle at Painted Post. The topsoil will be stockpiled at the site and once the compacted debris reaches final contours, two feet of topsoil will be spread and seeded for the final cover.

The toe-of-slopes of the fill will be between ten and fifteen feet below the tops of the flood control dikes so contamination of, either surface or ground waters is not expected.

RECORD OF TELEPHONE CONVERSATION

JOSEPH C. LU, P.E., P.C.
2230 PENFIELD ROAD
PENFIELD, NEW YORK 14526

DATE: 11/2/93
TIME: 0810
INDIVIDUAL: Howard Haughtaling
ORGANIZATION: Erwin Highway Superintendent

BY: GREG SINTON (GLS)
PROJECT NO.: 10606-04
TITLE: ERWIN LANDFILL
LOCATION: ERWIN
PHONE NO.: 1-607-962-0821

SUBJECT: Drums located at Erwin Landfill

ITEMS DISCUSSED: GLS notified Mr. Haughtaling of scheduled well sampling on 4, 5 Nov. Also requested any information he had about the drums at the landfill. Mr. Haughtaling was unsure that the drums were present but did not know how long they had been there or what they might contain.

COMMENTS OR ACTIONS REQUIRED:

BY:

Gregory I. Sinton

APPENDIX G

PHOTOGRAPHIC LOG

G-1

ecology and environment, inc.
PHOTOGRAPHIC RECORD

Client: New York State Department of Environmental Conservation

E & E Job No.: YR7000

Site: Erwin Town Landfill (No. 851003)

Camera: Make Olympus Infinity

SN 1481609

Lens Type Olympus 38mm

SN NA

Photographer: R. Watt Date: 5/4/94

Time: 11:58 Frame No.: 1

Comments*: View east of south drum group. Orange pin
flags mark locations of discrete soil samples composited into
sample DS-1.

*Comments to include location.



ecology and environment, inc.
PHOTOGRAPHIC RECORD

Client: New York State Department of Environmental Conservation

E & E Job No.: YR7000

Site: Erwin Town Landfill (No. 851003)

Camera: Make Olympus Infinity

SN 1481609

Lens Type Olympus 38mm

SN NA

Photographer: R. Watt Date: 5/4/94

Time: 11:58 Frame No.: 2

Comments*: View east of north drum group. Orange pin
 flags mark locations of discrete soil samples composited into
 sample DS-1.

*Comments to include location.



ecology and environment, inc.
PHOTOGRAPHIC RECORD

Client: New York State Department of Environmental Conservation		E & E Job No.: YR7000	
Site: Erwin Town Landfill (No. 851003)			
Camera: Make Olympus Infinity		SN	1481609
Lens Type Olympus 38mm		SN	NA
		Photographer: R. Watt Date: 5/4/94	
		Time: 11:59 Frame No.: 3	
		Comments*: View north of drums on west side of landfill	
		from a location south of the south drum group.	



ecology and environment, inc.
PHOTOGRAPHIC RECORD

Client: New York State Department of Environmental Conservation

E & E Job No.: YR7000

Site: Erwin Town Landfill (No. 851003)

Camera: Make Olympus Infinity

SN 1481609

Lens Type Olympus 38mm

SN NA

Photographer: R. Watt Date: 5/4/94

Time: 11:59 Frame No.: 4

Comments*: View south of the drums on the west side of
the landfill from a location north of the north drum group.

*Comments to include location.



ecology and environment, inc.
PHOTOGRAPHIC RECORD

Client: New York State Department of Environmental Conservation

E & E Job No.: YR7000

Site: Erwin Town Landfill (No. 851003)

Camera: Make Olympus Infinity

SN 1481609

Lens Type Olympus 38mm

SN NA

Photographer: R. Watt

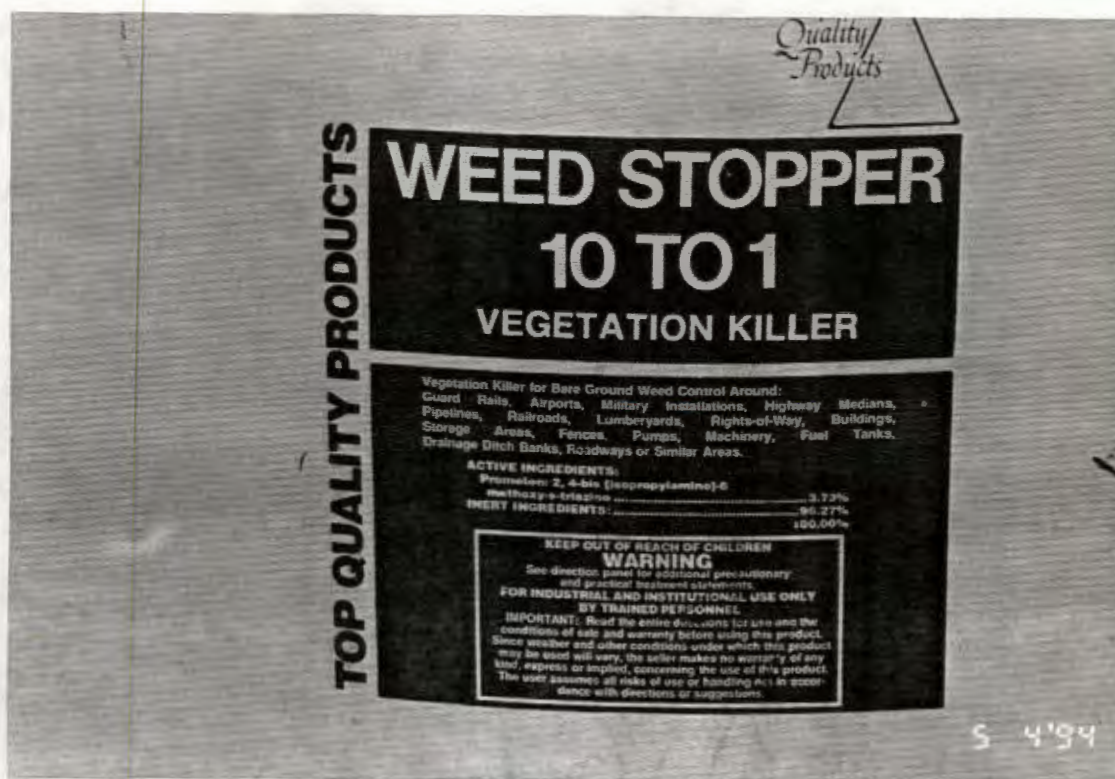
Date: 5/4/94

Time: 12:00

Frame No.: 5

Comments*: Label on drum identified as N-3. Drum
contained 10-15 gallons of an unknown white liquid.

*Comments to include location.



ecology and environment, inc.
PHOTOGRAPHIC RECORD

Client: New York State Department of Environmental Conservation

E & E Job No.: YR7000

Site: Erwin Town Landfill (No. 851003)

Camera: Make Olympus Infinity

SN 1481609

Lens Type Olympus 38mm

SN NA

Photographer: R. Watt

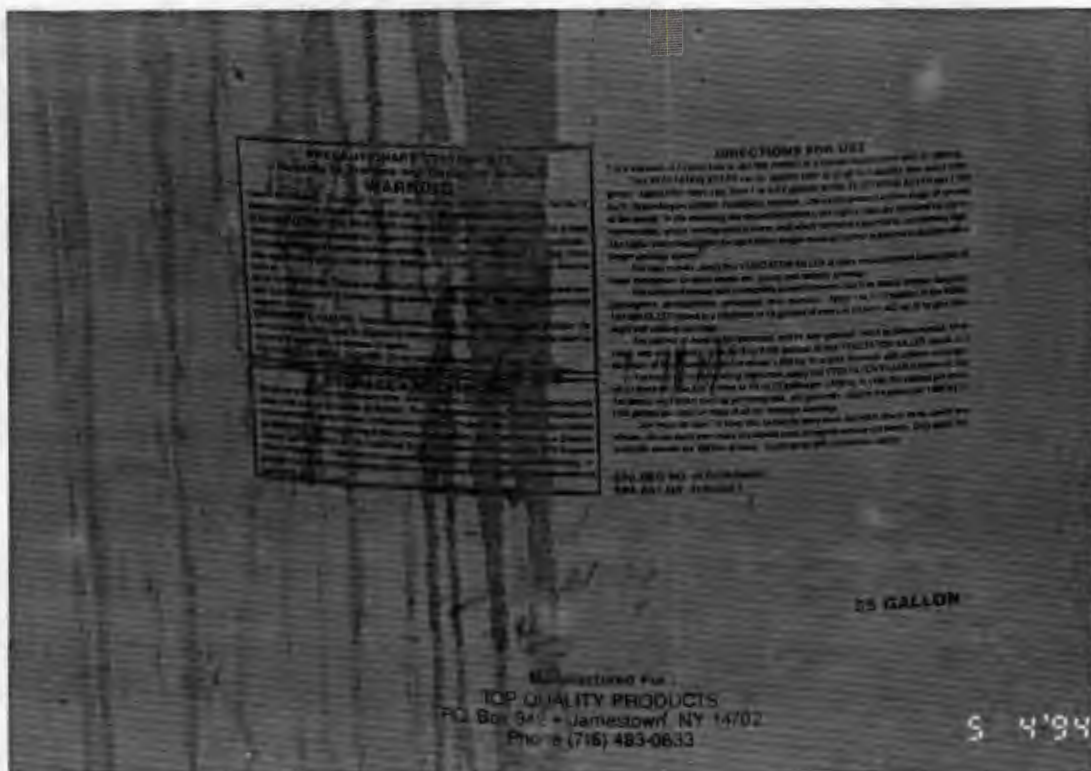
Date: 5/4/94

Time: 12:00

Frame No.: 6

Comments*: Label on drum identified as N-3. Drum
contained 10-15 gallons of an unknown white liquid.

*Comments to include location.



ecology and environment, inc.
PHOTOGRAPHIC RECORD

Client: New York State Department of Environmental Conservation		E & E Job No.: YR7000	
Site: Erwin Town Landfill (No. 851003)			
Camera: Make Olympus Infinity		SN	1481609
Lens Type Olympus 38mm		SN	NA
		Photographer: R. Watt Date: 5/4/94	
		Time: 12:02 Frame No.: 7	
		Comments*: Brown, hard, foam-like material in drum identified as S-1.	
*Comments to include location.			



APPENDIX H

DRUM SAMPLING LOGS

Wed 4 May 1994

0700 Chad Eich, George Eschhart, & Rick Matt
(EAE) depart HQ.
0945 Arrive on site.

Weather: Mostly sunny, clear, light wind, 100F

0950 Valerie Woodward, NYSDC, on-site.

Set up equipment for hazard characterization
of drums. Then inventory drums & label according
to #s assigned on e-l-e-93 (see pages 8 & 9)
One 5-gal container also present which would
have e-l-e - see page 15.

1030 Begin sampling open drums. Use glass trowel
rods to sample - fill test tubes for George to

begin haz. catting. Label samples as drum ID #s.
Haz. cat. info on separate log sheets.

Collect 7 water samples & one oil/water sample
from open topped drums (or those with holes)

1100 Stake out 10 locations (5 around each group
of drums) to collect soil sample (0-2").

Choose "suspect" locations - areas of stored
veggy or bare soil. Composite these into one
sample, DS-1, for full TCL plus RGA
characteristic (excluding toxicity)

i.e. - TCL vocs, BNA, PBA/REST, insect & ignitability
corrosivity, & reactivity. + MS/MSD (640 ml @ 3.8%)

1212 Collect solid sample DM-5-1 of foam-like material
(galurethane?) from drum 5-1. Collect 2 e-g

jis for full TCLP + ignitability, reactivity, & corrosivity

1220 Chad & Rick don Level B (SCBA) w/ George in
Level C (airh cant). Open N-3 - white liquid on EVA

Open N-7 - white liquid. 2:00 pm on OVA

Could not open N-10
Zun may cut on N-3 & N-7

12:00 5-4-94

2

WED 4 MAY 1994

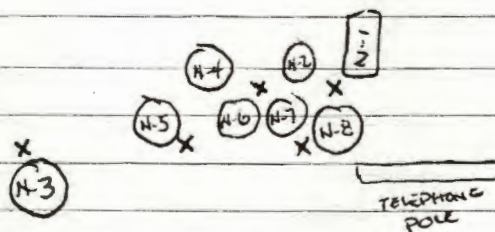
DRUM INVENTORY

Reference pages 3 & 9 of this log. Made minor changes to list, but otherwise all drums still present & in same condition as on Aug 6, 1993.

Also present is 5-gal blue container labeled "Fisher Scientific Company, Chemical Manufacturing Division, Fair Lawn, NJ 07410" 2 1/8 full, hand labeled "Kerosene" - ID as S-9

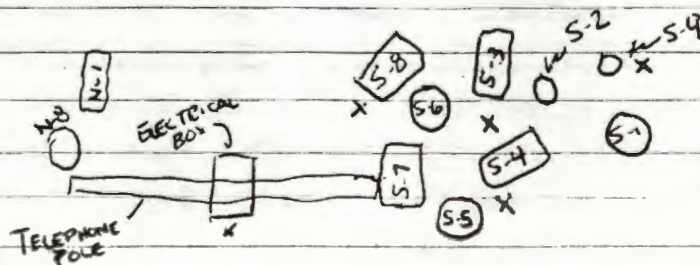
← N

"NORTH" DRUM GROUP



x's mark location of discrete soil samples composited into sample DS-1

"SOUTH" DRUM GROUP



WALL

WED 4 MAY 1994

PHOTOS

- 1 11:58 view E of south drum group (orange flag are location)
- 2 " " north drum group (of soil sample DS-1)
- 3 11:59 view N of drums from S of south group
- 4 view S " " " N of north group
- 5 12:00 Label on ~~pesticide~~ herbicide drum N-3
- 6 " " "
- 7 12:02 Material in drum S-1.
- 8
- 9
- 10
- 11
- 12

1215 Collect oil sample DM-S-2 from drum S-2 - 240 ml & 1 ⁴/₈ oz jar
for TEL VOCs, PCB/Pest, & ignit./react./corros. & Pb

Could not

1250 Open drum S-16; however, notice a small hole
near bottom - pour a few oz out for haz cat.
its light grade oil - 3ppm on OVA.

1310 Open 5-gal container S-9 - 10 ppm on OVA

Very little inside - looks like muddy water.

1320 Talk to Val M. about samples. Here's what
we recommend so far:

- Drums S-3/8 & N-8/2/4/5 appeared to consist of
rainwater (based on haz. cat) ∴ will composite into 1 sample for RCRA
- Drums N-3 & N-7 have white liquid & flammable layer.
Recom. ignit./react./corros.; ^{TCL inorganics} ~~TCL~~ ²⁰ ~~Pest~~; TCL VOCs, & BN/4
PCB/Pest. for each drum.

1335 Valerie off site. EdE will leave shortly to eat & find nec.
tools to open N-6

7. Watt 5-4-94 Julie Woodward
5/4/94

WED 4 MAY 1994

1520 Got drum N-6 open - contains oil & water

- location)
-1
- Recommend sampling for ignit/corros./react.; TCL VOCs & PCB/Pest. & Pb
 - Drum S-5 appears to contain soap - recommend sampling for ignit/corros./react.

John Woodruff 5/4/94

SAMPLES		TCN PCPA	TU VOCS	TU PCB/PEST	FULL TCL	FULL TUP	Pb
DM-S-1	12:12	X	-	-	-	X	-
DS-1	11:10	X	-	-	X	-	-
DM-S-2	12:15	X	X	X	-	-	X
DM-N-6	15:30	X	X	X	-	-	X
DM-N-7	15:50	X	-	-	X	-	-
DM-N-3	15:45	X	-	-	X	-	-
DM-S-5	16:15	X	-	-	-	-	-
DM-W	16:30	X	-	-	-	-	-
TB-5494	16:50	-	X	-	-	-	-

TB-050494 is trip blank for TCL VOCs - only 1 vial left. Preserved w/ HCl.

All samples on ice.

Leave 5-gal sealed pail (DOT 17-H) w/ hot trash - gloves, tyvek, contain'd towels, etc. Labeled S-10.

1710 Depart site.

1950 Deliver samples to ASC.

R. Woodruff