LPC# 1190405257 Madison County
Granite City Ditch
ILSFN# 0507809
SF/HRS
vol. 2 of 2

CERCLA Integrated Site Assessment Analytical Results

Illinois Environmental Protection Agency

2200 Churchill Road
P. O. Box 19276
Springfield, IL 62794-9276

EPA Region 5 Records Ctr.
327883

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

Memorandum

Date: May 24th, 1999

To: Bruce Everetts

From: Dave Reed

Re: Data validation on SDG D903798

Data validation has been completed for the above referenced site. Below is a list of the compounds or analytes which were qualified in each sample, the reasons they were qualified, and the resulting bias for the compound or analyte. Also attached are the organic sample results (Form 1s) and the organic data validation checklist. If you have any questions please feel free to call me at 7-1828.

Organic Qualifiers and Resulting Bias

Sample Number	Compound	Qualifier	Reasons Qualified	Overall Bias
X201	2-Butanone (MEK) Benzene Toluene Ethylbenzene Xylene (total)	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
	Bromomethane	R	(1) %D between the RRF50 and the mean RRF from the initial calibration is out of limits. (2) The calculated RRF50 is less than 0.05. (3) The compound was undetected.	No Bias-Result Rejected

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Sample Number	Compound	Qualifier	Reason Qualified	Overall Bias
X202	Carbon disulfide Chloroform 4-Methyl-2-pentanone (MIBK) Toluene Ethylbenzene Xylene (total)	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
	Bromomethane	R	(1) %D between the RRF50 and the mean RRF from the initial calibration is out of limits. (2) The calculated RRF50 is less than 0.05. (3) The compound was undetected.	No Bias-Result Rejected
X203	Carbon disulfide Benzene 4-Methyl-2-pentanone (MIBK) Toluene Ethylbenzene Xylene (total)	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
X204	Carbon disulfide Benzene Toluene Xylene (total)	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
X205	Carbon disulfide 2-Butanone (MEK) Toluene Xylene (total)	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
X206	Methylene Chloride Carbon disulfide Toluene Xylene (total)	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
X207	Carbon disulfide 2-Butanone (MEK) Toluene Ethylbenzene Xylene (total)	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown

Sample Number	Compound	Qualifier	Reason Qualified	Overall Bias
X208	Carbon disulfide Toluene Xylene (total)	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
X209	Carbon disulfide Toluene Xylene (total)	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown

SDG NARRATIVE

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
825 N. RUTLEDGE
SPRINGFIELD, ILLINOIS 62702
(217)-782-9873

Case: Granite City Ditch

Sample Identification	IEPA Sample Number
X201	D903865
X202	D903863
X203	D903810
X204	D903808
X205	D903806
X206	D903804
X207	D903802
X208	D903800
X209	D903798
X208MS	D903800MS
X208MSD	D903800MSD
VBLKSL1	VBLK041399
VBLKSL2	VBLK041499
VBLKSL3	VBLK042199

RECEIVED
MAY 17 1999
IEPA LABORATORIES
Manager's Office

The matrix spikes X208MS and X208MSD were spiked with the complete standard instead of the five matrix compounds.

The two ounce jars which were sent in for percent moisture determination were assigned separate IEPA sample numbers but were not included here.

The percent difference between the daily relative response factor and the average relative response factor for bromomethane on April 14th was greater than the 40% allowed by the statement of work. However, no bromomethane was found in any samples run that day.

The first internal standard in all samples is different than that listed in the statement of work because the laboratory was not informed that these samples were CLP samples before analysis began.

VOLATILE FRACTION

The spectral disagreement for the following compounds is more than the 20% allowed when compared to the standard spectrum:

X201
- MEK coelutes with cis-1,2-Dichloroethene in the standard.
- Benzene coelutes with 1,2-Dichloroethane in the standard.
- m & p-Xylenes coelute with a TIC.
- o-Xylene coelutes with Styrene in the standard.

X202
- MEK coelutes with cis-1,2-Dichloroethene in the standard.
- m & p-Xylenes coelute with a TIC.
- o-Xylene coelutes with Styrene in the standard.

X203
- Benzene coelutes with 1,2-Dichloroethane in the standard.
- m & p-Xylenes coelute with a TIC.
- o-Xylene coelutes with Styrene in the standard.

X204
- Benzene coelutes with 1,2-Dichloroethane in the standard.
- m & p-Xylenes coelute with a TIC.

X205
- MEK coelutes with cis-1,2-Dichloroethene in the standard.
- m & p-Xylenes coelute with a TIC.
- o-Xylene coelutes with Styrene in the standard.

X206
- Methylene Chloride coelutes with a TIC.
- m & p-Xylenes coelute with a TIC.
- o-Xylene coelutes with Styrene in the standard.

X207
- MEK coelutes with cis-1,2-Dichloroethene in the standard.
- m & p-Xylenes coelute with a TIC.
- o-Xylene coelutes with Styrene in the standard.

X208
- m & p-Xylenes coelute with a TIC.

X209
- m & p-Xylenes coelute with a TIC.

Gary Germann
GC/MS Supervisor

5/6/99
Date

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X201

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903865

Sample wt/vol: 5.3 (g/mL) G Lab File ID: E0414C05

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 40 Date Analyzed: 04/14/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	16	U
74-83-9	Bromomethane	~~16~~	~~U~~ R
75-01-4	Vinyl chloride	16	U
75-00-3	Chloroethane	16	U
75-09-2	Methylene chloride	16	U
67-64-1	Acetone	25	
75-15-0	Carbon disulfide	14	B
75-35-4	1,1-Dichloroethene	16	U
75-34-3	1,1-Dichloroethane	16	U
540-59-0	1,2-Dichloroethene (total)	16	U
67-66-3	Chloroform	16	U
107-06-2	1,2-Dichloroethane	16	U
78-93-3	2-Butanone (MEK)	4	J
71-55-6	1,1,1-Trichloroethane	16	U
56-23-5	Carbon tetrachloride	16	U
75-27-4	Bromodichloromethane	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
79-01-6	Trichloroethene	16	U
124-48-1	Dibromochloromethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
71-43-2	Benzene	2	J
10061-02-6	trans-1,3-Dichloropropene	16	U
75-25-2	Bromoform	16	U
108-10-1	4-Methyl-2-pentanone (MIBK)	16	U
591-78-6	2-Hexanone (MBK)	16	U
127-18-4	Tetrachloroethene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
108-88-3	Toluene	9	J
108-90-7	Chlorobenzene	16	U
100-41-4	Ethylbenzene	1	J
100-42-5	Styrene	16	U
1330-20-7	Xylene (total)	4	J

DR 5-24-99

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X201

Lab Name: ILLINOIS EPA Contract: 1190405157

L. Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903865

Sample wt/vol: 5.3 (g/mL) G Lab File ID: E0414C05

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 40 Date Analyzed: 04/14/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 7446-09-5	SULFUR DIOXIDE	5.27	260	NJ
2.	UNKNOWN HYDROCARBON	6.80	11	J
3.	UNKNOWN HYDROCARBON	7.38	7	J
4.	UNKNOWN HYDROCARBON	9.18	5	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X202

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903863

Sample wt/vol: 4.0 (g/mL) G Lab File ID: E0414C04

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 61 Date Analyzed: 04/14/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	32	U
74-83-9	Bromomethane	~~32~~	~~U~~ R
75-01-4	Vinyl chloride	32	U
75-00-3	Chloroethane	32	U
75-09-2	Methylene chloride	32	U
67-64-1	Acetone	280	
75-15-0	Carbon disulfide	23	BJ
75-35-4	1,1-Dichloroethene	32	U
75-34-3	1,1-Dichloroethane	32	U
540-59-0	1,2-Dichloroethene (total)	32	U
67-66-3	Chloroform	4	J
107-06-2	1,2-Dichloroethane	32	U
78-93-3	2-Butanone (MEK)	47	
71-55-6	1,1,1-Trichloroethane	32	U
56-23-5	Carbon tetrachloride	32	U
75-27-4	Bromodichloromethane	32	U
78-87-5	1,2-Dichloropropane	32	U
10061-01-5	cis-1,3-Dichloropropene	32	U
79-01-6	Trichloroethene	32	U
124-48-1	Dibromochloromethane	32	U
79-00-5	1,1,2-Trichloroethane	32	U
71-43-2	Benzene	32	U
10061-02-6	trans-1,3-Dichloropropene	32	U
75-25-2	Bromoform	32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	8	J
591-78-6	2-Hexanone (MBK)	32	U
127-18-4	Tetrachloroethene	32	U
79-34-5	1,1,2,2-Tetrachloroethane	32	U
108-88-3	Toluene	26	J
108-90-7	Chlorobenzene	32	U
100-41-4	Ethylbenzene	4	J
100-42-5	Styrene	32	U
1330-20-7	Xylene (total)	14	J

DQ 5-24-99

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X202

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903863

Sample wt/vol: 4.0 (g/mL) G Lab File ID: E0414C04

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 61 Date Analyzed: 04/14/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) 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	5.09	31	J
2.	UNKNOWN	5.50	37	J
3. 7446-09-5	SULFUR DIOXIDE	5.70	71	NJ
4.	UNKNOWN HYDROCARBON	6.80	30	J
5.	UNKNOWN HYDROCARBON	7.38	36	J
6. 75-18-3	DIMETHYL SULFIDE	8.48	22	NJ
7.	UNKNOWN HYDROCARBON	10.08	23	J
8.	UNKNOWN HYDROCARBON	15.87	82	J
9. 66-25-1	HEXANAL	16.95	23	NJ
10.	UNKNOWN HYDROCARBON	19.95	35	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903810

Sample wt/vol: 3.6 (g/mL) G Lab File ID: E0413C11

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 57 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	32	U
74-83-9	Bromomethane	32	U
75-01-4	Vinyl chloride	32	U
75-00-3	Chloroethane	32	U
75-09-2	Methylene chloride	32	U
67-64-1	Acetone	220	
75-15-0	Carbon disulfide	22	J
75-35-4	1,1-Dichloroethene	32	U
75-34-3	1,1-Dichloroethane	32	U
540-59-0	1,2-Dichloroethene (total)	32	U
67-66-3	Chloroform	32	U
107-06-2	1,2-Dichloroethane	32	U
78-93-3	2-Butanone (MEK)	32	U
71-55-6	1,1,1-Trichloroethane	32	U
56-23-5	Carbon tetrachloride	32	U
75-27-4	Bromodichloromethane	32	U
78-87-5	1,2-Dichloropropane	32	U
10061-01-5	cis-1,3-Dichloropropene	32	U
79-01-6	Trichloroethene	32	U
124-48-1	Dibromochloromethane	32	U
79-00-5	1,1,2-Trichloroethane	32	U
71-43-2	Benzene	12	J
10061-02-6	trans-1,3-Dichloropropene	32	U
75-25-2	Bromoform	32	U
108-10-1	4-Methyl-2-pentanone(MIBK)	12	J
591-78-6	2-Hexanone (MBK)	32	U
127-18-4	Tetrachloroethene	32	U
79-34-5	1,1,2,2-Tetrachloroethane	32	U
108-88-3	Toluene	26	J
108-90-7	Chlorobenzene	32	U
100-41-4	Ethylbenzene	6	J
100-42-5	Styrene	32	U
1330-20-7	Xylene (total)	14	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1190405157

L. Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903810

Sample wt/vol: 3.6 (g/mL) G Lab File ID: E0413C11

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 57 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) 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	5.10	58	J
2.		UNKNOWN	5.51	49	J
3.		UNKNOWN HYDROCARBON	6.81	52	J
4.		UNKNOWN HYDROCARBON	7.38	47	J
5.	75-18-3	DIMETHYL SULFIDE	8.48	46	NJ
6.		UNKNOWN HYDROCARBON	9.19	22	J
7.		UNKNOWN HYDROCARBON	10.08	36	J
8.		UNKNOWN HYDROCARBON	15.87	27	J
9.	66-25-1	HEXANAL	16.95	52	NJ
10.		UNKNOWN HYDROCARBON	19.94	60	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X204

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903808

Sample wt/vol: 3.5 (g/mL) G Lab File ID: E0413C10

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 55 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	31	U
74-83-9	Bromomethane	31	U
75-01-4	Vinyl chloride	31	U
75-00-3	Chloroethane	31	U
75-09-2	Methylene chloride	31	U
67-64-1	Acetone	210	
75-15-0	Carbon disulfide	23	J
75-35-4	1,1-Dichloroethene	31	U
75-34-3	1,1-Dichloroethane	31	U
540-59-0	1,2-Dichloroethene (total)	31	U
67-66-3	Chloroform	31	U
107-06-2	1,2-Dichloroethane	31	U
78-93-3	2-Butanone (MEK)	31	U
71-55-6	1,1,1-Trichloroethane	31	U
56-23-5	Carbon tetrachloride	31	U
75-27-4	Bromodichloromethane	31	U
78-87-5	1,2-Dichloropropane	31	U
10061-01-5	cis-1,3-Dichloropropene	31	U
79-01-6	Trichloroethene	31	U
124-48-1	Dibromochloromethane	31	U
79-00-5	1,1,2-Trichloroethane	31	U
71-43-2	Benzene	6	J
10061-02-6	trans-1,3-Dichloropropene	31	U
75-25-2	Bromoform	31	U
108-10-1	4-Methyl-2-pentanone (MIBK)	31	U
591-78-6	2-Hexanone (MBK)	31	U
127-18-4	Tetrachloroethene	31	U
79-34-5	1,1,2,2-Tetrachloroethane	31	U
108-88-3	Toluene	8	J
108-90-7	Chlorobenzene	31	U
100-41-4	Ethylbenzene	31	U
100-42-5	Styrene	31	U
1330-20-7	Xylene (total)	5	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X204

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903808

Sample wt/vol: 3.5 (g/mL) G Lab File ID: E0413C10

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 55 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.09	28	J
2. 7446-09-5	SULFUR DIOXIDE	5.70	71	NJ
3.	UNKNOWN HYDROCARBON	6.80	24	J
4.	UNKNOWN HYDROCARBON	7.38	10	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X205

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903806

Sample wt/vol: 3.8 (g/mL) G Lab File ID: E0413C09

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 35 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	20	U
74-83-9	Bromomethane	20	U
75-01-4	Vinyl chloride	20	U
75-00-3	Chloroethane	20	U
75-09-2	Methylene chloride	20	U
67-64-1	Acetone	67	
75-15-0	Carbon disulfide	6	J
75-35-4	1,1-Dichloroethene	20	U
75-34-3	1,1-Dichloroethane	20	U
540-59-0	1,2-Dichloroethene (total)	20	U
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
78-93-3	2-Butanone (MEK)	11	J
71-55-6	1,1,1-Trichloroethane	20	U
56-23-5	Carbon tetrachloride	20	U
75-27-4	Bromodichloromethane	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
79-01-6	Trichloroethene	20	U
124-48-1	Dibromochloromethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
71-43-2	Benzene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-pentanone (MIBK)	20	U
591-78-6	2-Hexanone (MBK)	20	U
127-18-4	Tetrachloroethene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-88-3	Toluene	3	J
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
100-42-5	Styrene	20	U
1330-20-7	Xylene (total)	2	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X205

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903806

Sample wt/vol: 3.8 (g/mL) G Lab File ID: E0413C09

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 35 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) 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	5.09	10	J
2.	UNKNOWN	16.20	8	JB
3.				
4.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X206

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903805

Sample wt/vol: 3.9 (g/mL) G Lab File ID: E0413C08

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 60 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	32	U
74-83-9	Bromomethane	32	U
75-01-4	Vinyl chloride	32	U
75-00-3	Chloroethane	32	U
75-09-2	Methylene chloride	5	BJ
67-64-1	Acetone	83	
75-15-0	Carbon disulfide	8	J
75-35-4	1,1-Dichloroethene	32	U
75-34-3	1,1-Dichloroethane	32	U
540-59-0	1,2-Dichloroethene (total)	32	U
67-66-3	Chloroform	32	U
107-06-2	1,2-Dichloroethane	32	U
78-93-3	2-Butanone (MEK)	32	U
71-55-6	1,1,1-Trichloroethane	32	U
56-23-5	Carbon tetrachloride	32	U
75-27-4	Bromodichloromethane	32	U
78-87-5	1,2-Dichloropropane	32	U
10061-01-5	cis-1,3-Dichloropropene	32	U
79-01-6	Trichloroethene	32	U
124-48-1	Dibromochloromethane	32	U
79-00-5	1,1,2-Trichloroethane	32	U
71-43-2	Benzene	32	U
10061-02-6	trans-1,3-Dichloropropene	32	U
75-25-2	Bromoform	32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	32	U
591-78-6	2-Hexanone (MBK)	32	U
127-18-4	Tetrachloroethene	32	U
79-34-5	1,1,2,2-Tetrachloroethane	32	U
108-88-3	Toluene	5	J
108-90-7	Chlorobenzene	32	U
100-41-4	Ethylbenzene	32	U
100-42-5	Styrene	32	U
1330-20-7	Xylene (total)	6	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X206

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903805

Sample wt/vol: 3.9 (g/mL) G Lab File ID: E0413C08

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 60 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) 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	5.10	12	J
2.	UNKNOWN HYDROCARBON	6.81	12	J
3.	UNKNOWN	16.20	14	JB
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X207

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903802

Sample wt/vol: 4.3 (g/mL) G Lab File ID: E0413C06

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 31 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	17	U
74-83-9	Bromomethane	17	U
75-01-4	Vinyl chloride	17	U
75-00-3	Chloroethane	17	U
75-09-2	Methylene chloride	17	U
67-64-1	Acetone	17	
75-15-0	Carbon disulfide	10	J
75-35-4	1,1-Dichloroethene	17	U
75-34-3	1,1-Dichloroethane	17	U
540-59-0	1,2-Dichloroethene (total)	17	U
67-66-3	Chloroform	17	U
107-06-2	1,2-Dichloroethane	17	U
78-93-3	2-Butanone (MEK)	4	J
71-55-6	1,1,1-Trichloroethane	17	U
56-23-5	Carbon tetrachloride	17	U
75-27-4	Bromodichloromethane	17	U
78-87-5	1,2-Dichloropropane	17	U
10061-01-5	cis-1,3-Dichloropropene	17	U
79-01-6	Trichloroethene	17	U
124-48-1	Dibromochloromethane	17	U
79-00-5	1,1,2-Trichloroethane	17	U
71-43-2	Benzene	17	U
10061-02-6	trans-1,3-Dichloropropene	17	U
75-25-2	Bromoform	17	U
108-10-1	4-Methyl-2-pentanone (MIBK)	17	U
591-78-6	2-Hexanone (MBK)	17	U
127-18-4	Tetrachloroethene	17	U
79-34-5	1,1,2,2-Tetrachloroethane	17	U
108-88-3	Toluene	15	J
108-90-7	Chlorobenzene	17	U
100-41-4	Ethylbenzene	2	J
100-42-5	Styrene	17	U
1330-20-7	Xylene (total)	6	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X207

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903802

Sample wt/vol: 4.3 (g/mL) G Lab File ID: E0413C06

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 31 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.10	13	J
2.	UNKNOWN	5.51	16	J
3.	UNKNOWN HYDROCARBON	6.81	16	J
4.	UNKNOWN HYDROCARBON	7.38	10	J
5.	UNKNOWN	9.18	8	J
6.	UNKNOWN HYDROCARBON	10.08	6	J
7.	UNKNOWN HYDROCARBON	14.08	7	J
.	UNKNOWN	16.20	6	JB
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X208

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903800

Sample wt/vol: 5.7 (g/mL) G Lab File ID: E0413C05

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 25 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene chloride	12	U
67-64-1	Acetone	12	
75-15-0	Carbon disulfide	3	J
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone (MEK)	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone (MIBK)	12	U
591-78-6	2-Hexanone (MBK)	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	4	J
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	2	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X208

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903800

Sample wt/vol: 5.7 (g/mL) G Lab File ID: E0413C05

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 25 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.09	7	J
2.	UNKNOWN	5.51	4	J
3.	UNKNOWN HYDROCARBON	6.80	5	J
4.	UNKNOWN HYDROCARBON	7.38	4	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X209

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903798

Sample wt/vol: 5.1 (g/mL) G Lab File ID: E0413C12

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 25 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene chloride	13	U
67-64-1	Acetone	20	
75-15-0	Carbon disulfide	4	J
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone (MEK)	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U
591-78-6	2-Hexanone (MBK)	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	7	J
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (total)	3	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X209

L-' Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: D903798

Sample wt/vol: 5.1 (g/mL) G Lab File ID: E0413C12

Level: (low/med) LOW Date Received: 04/13/99

% Moisture: not dec. 25 Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

Number TICs found: 8

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	5.10	16	J
2.		UNKNOWN	5.52	38	J
3.		UNKNOWN HYDROCARBON	6.81	10	J
4.		UNKNOWN HYDROCARBON	7.38	8	J
5.		UNKNOWN HYDROCARBON	9.19	5	J
6.		UNKNOWN HYDROCARBON	10.08	5	J
7.		UNKNOWN HYDROCARBON	14.08	5	J
8.		UNKNOWN	16.20	5	JB
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2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

L Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (DCE)#	SMC2 (TOL)#	SMC3 (BFB)#	OTHER	TOT OUT
01	VBLKSL1	105	100	102		0
02	X208	102	105	99		0
03	X207	106	102	102		0
04	X206	89	123	80		0
05	X205	88	122	84		0
06	X204	94	116	80		0
07	X203	94	127	84		0
08	X209	103	101	99		0
09	VBLKSL2	102	100	100		0
10	X202	103	116*	80		0
11	X201	101	104	84		0
12	VBLKSL3	106	99	102		0
13	X208MS	102	98	100		0
14	X208MSD	106	100	101		0
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		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(70-121)
SMC2 (TOL)	= Toluene-d8	(84-138)
SMC3	= 4-Bromofluorobenzene	(59-113)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix Spike - EPA Sample No.: X208 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50.00	0.00	48.00	96	59-172
Trichloroethene	50.00	0.00	46.00	92	62-137
Benzene	50.00	0.00	49.00	98	66-142
Toluene	50.00	4.51	51.00	93	59-139
Chlorobenzene	50.00	0.00	43.00	86	60-133

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.00	37.00	74	26*	22	59-172
Trichloroethene	50.00	37.00	74	22	24	62-137
Benzene	50.00	41.00	82	18	21	66-142
Toluene	50.00	42.00	75	21	21	59-139
Chlorobenzene	50.00	36.00	72	18	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKSL1

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Lab File ID: E0413C03 Lab Sample ID: VBLK041399

Date Analyzed: 04/13/99 Time Analyzed: 1159

GC Column: DB-624, 60MID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: HPMS5

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	X208	D903800	E0413C05	1309
02	X207	D903802	E0413C06	1343
03	X206	D903805	E0413C08	1453
04	X205	D903806	E0413C09	1528
05	X204	D903808	E0413C10	1602
06	X203	D903810	E0413C11	1637
07	X209	D903798	E0413C12	1712
08				
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COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKSL1

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: VBLK041399

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E0413C03

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	3	
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone (MEK)	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U
591-78-6	2-Hexanone (MBK)	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKSL1

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: VBLK041399

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E0413C03

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 04/13/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (mL) 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 HYDROCARBON	16.20	3	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
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11.					
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4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKSL2

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Lab File ID: E0414C03 Lab Sample ID: VBLK041499

Date Analyzed: 04/14/99 Time Analyzed: 0953

GC Column: DB-624, 60MID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: HPMS5

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	X202	D903863	E0414C04	1027
02	X201	D903865	E0414C05	1102
03				
04				
05				
06				
07				
08				
09				
10				
11				
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COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKSL2

L-ᵃ Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: VBLK041499

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E0414C03

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 04/14/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	2	
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	1	
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone (MEK)	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U
591-78-6	2-Hexanone (MBK)	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKSL2

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: VBLK041499

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E0414C03

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 04/14/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (mL) 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 HYDROCARBON	6.41	5	J
2.	UNKNOWN	16.20	7	J
3.				
4.				
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4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKSL3

I ' Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Lab File ID: E0421C03 Lab Sample ID: VBLK042199

Date Analyzed: 04/21/99 Time Analyzed: 0958

GC Column: DB-624, 60MID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: HPMS5

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	X208MS	D903800MS	E0421C07	1405
02	X208MSD	D903800MSD	E0421C08	1440
03				
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COMMENTS:

FORM IV VOA 3/90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKSL3

J Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: VBLK042199

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E0421C03

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 04/21/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	3	
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	1	
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone (MEK)	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U
591-78-6	2-Hexanone (MBK)	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKSL3

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Matrix: (soil/water) SOIL Lab Sample ID: VBLK042199

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E0421C03

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 04/21/99

GC Column: DB-624, 60M ID: 0.25 (mm) Dilution Factor: 1.0

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

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.42	4	J
2.	UNKNOWN	16.20	7	J
3.				
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8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

I Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Lab File ID (Standard): E0413C02 Date Analyzed: 04/13/99

Instrument ID: HPMS5 Time Analyzed: 1124

GC Column: DB-624, 60M ID: 0.25 (mm) Heated Purge: (Y/N) Y

		IS1 AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	1825058	12.00	2579535	13.23	2159363	18.18
	UPPER LIMIT	3650116	12.50	5159070	13.73	4318726	18.68
	LOWER LIMIT	912529	11.50	1289768	12.73	1079682	17.68
	EPA SAMPLE NO.						
01	VBLKSL1	1732573	12.00	2469382	13.24	2069121	18.18
02	X208	1661411	12.00	2336872	13.24	1895342	18.18
03	X207	1652741	12.00	2348751	13.24	1959341	18.18
04	X206	1499544	12.00	1904739	13.24	1190932	18.18
05	X205	1516929	12.01	1942315	13.23	1236624	18.18
06	X204	1437409	12.00	1948968	13.23	1278048	18.18
07	X203	1513635	12.00	1963004	13.24	1176070	18.18
	X209	1659520	12.00	2345981	13.24	1937695	18.18
10							
11							
12							
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20							
21							
22							

IS1 = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

L Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Lab File ID (Standard): E0414C02 Date Analyzed: 04/14/99

Instrument ID: HPMS5 Time Analyzed: 0835

GC Column: DB-624, 60M ID: 0.25 (mm) Heated Purge: (Y/N) Y

		IS1 AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	1721889	12.00	2420025	13.24	2005793	18.18
	UPPER LIMIT	3443778	12.50	4840050	13.74	4011586	18.68
	LOWER LIMIT	860944	11.50	1210012	12.74	1002896	17.68
	EPA SAMPLE NO.						
01	VBLKSL2	1675000	12.00	2360022	13.23	1921182	18.18
02	X202	1414102	12.00	1943059	13.24	1231708	18.18
03	X201	1575807	12.00	2239798	13.23	1681141	18.18
04							
05							
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11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA 3/90

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ILLINOIS EPA Contract: 1190405157

Lab Code: SPFLD Case No.: GRANITE SAS No.: SDG No.: 903798

Lab File ID (Standard): E0421C02 Date Analyzed: 04/21/99

Instrument ID: HPMS5 Time Analyzed: 0914

GC Column: DB-624, 60M ID: 0.25 (mm) Heated Purge: (Y/N) Y

		IS1 AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	1677956	12.00	2339932	13.24	1929311	18.18
	UPPER LIMIT	3355912	12.50	4679864	13.74	3858622	18.68
	LOWER LIMIT	838978	11.50	1169966	12.74	964656	17.68
	EPA SAMPLE NO.						
01	VBLKSL3	1558282	12.00	2211863	13.24	1825362	18.18
02	X208MS	1605438	12.01	2278604	13.24	1891924	18.18
03	X208MSD	1135533	12.01	1621502	13.24	1360919	18.18
04							
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20							
21							
22							

IS1 = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Data Validation Checklist
Site Name: Granite City Ditch
SDG No.: D903865
Laboratory: IEPA - Organic
Page 1 of 16
OLM01.0

PRELIMINARY REVIEW

1. *Chain-of -Custody*

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

Comments:
For sample X206, the correct laboratory number is D903805. On page 1 of the data package, the laboratory lists the number as D903804.

2. *Case Narrative*

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

Comments:
The case narrative is not complete. The narrative did not contain the mandatory "verbatim" statement about the data package being certified for compliance with the contract.

Data Validation Checklist
Site Name: _____
SDG No.: _____
Laboratory: _____
Page 2 of 16

I. Holding Times

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

EPA Number	Lab Number	Date Coll.	Date Rec'd.	VOA Date Anal.	Semi-VOA Date Extr	Semi-VOA Date Anal.	Pesticide Date Extr	Pesticide Date Anal.
X201	D903865	4-13-99	4-13-99	4-14-99				
X202	D903863	4-13-99	4-13-99	4-14-99				
X203	D903810	4-12-99	4-13-99	4-13-99				
X204	D903808	4-12-99	4-13-99	4-13-99				
X205	D903806	4-12-99	4-13-99	4-13-99				
X206	D903805	4-12-99	4-13-99	4-13-99				
X207	D903802	4-12-99	4-13-99	4-13-99				
X208	D903800	4-12-99	4-13-99	4-13-99				
X209	D903798	4-12-99	4-13-99	4-13-99				
X208 MS	D903800MS	4-12-99	4-13-99	4-14-99				
X208 MSD	D903800MSD	4-12-99	4-13-99	4-14-99				
VBLKSL1	VBLK 041399	—	—	4-13-99				
VBLKSL2	VBLK 041499	—	—	4-13-99				
VBLKSL3	VBLK 042199	—	—	4-21-99				

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

All samples met the recommended 14 day holding time

II. GC/MS Instrument Performance Check

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

1. ***Evaluate Forms V and Raw Data***

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

2. ***Verify Raw Data Format***

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

3. ***Verify Ion Abundance Criteria***

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

4. ***Verify Background Correction***

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

Comments:
None

Data Validation Checklist
Site Name: _____
SDG No.: _____
Laboratory: _____
Page 4 of 16

III. Initial Calibration

GC/MS

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

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

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

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

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

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

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

4. ***Evaluate Initial Calibration RRFs and mean RRFs.***

   YES NO
   a. [X] [ ] Check and recalculate the RRFs and mean RRFs for several target compounds (at least one associated with each internal standard).

   b. [X] [ ] Check that, for all target compounds and surrogates, the mean RRFs meet the applicable criteria. Note any "outliers" on the Calibration Outliers Form.

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

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

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

Comments:
Bromomethane RRF100, RRF200, and $\overline{RRF}$ all < 0.100 ; % RSD > 20.5
Trichloroethane RRF200 < 0.300
1,1,2,2-Tetrachloroethane RRFs and $\overline{RRF}$ all < 0.500
1,1,1-Trichloroethane used wrong IS to calculate RRFs for 10, 20, 50, 100, and 2
STD

Data Validation Checklist
Site Name: _____
SDG No.: _____
Laboratory: _____
Page 5 of 16

IV. Continuing Calibration

GC/MS

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

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

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

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

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

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

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

Comments:
CC %D was 82.2% for Bromomethane for 4-14-99 and min. RRF not me
1,1,1-Trichloroethane used wrong IS to calculate all thee CCs.
Minimum RRF not met for Bromomethane 4-13-99 CC.
Bromomethane was flagged "R" for samples ran with 4-14-99 CC.

Data Validation Checklist
Site Name: _____
SDG No.: _____
Laboratory: _____
Page 6 of 16

V. Blanks

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

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

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

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

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

Blank Summary

Blank Sample No.	VBLKSL1		VBLKSL2		VBLKSL3			
Date Anal. or Extr.	4-13-99		4-14-99		4-21-99			
Instrument	HPMS 5		HPMS 5		HPMS 5			
TCL Comp'd	µg/Kg Amount	TCL Comp'd	Amount	TCL Comp'd	Amount	TCL Comp'd	Amount
$MeCl_2$	3	$MeCl_2$	2	$MeCl_2$	3		
		CS_2	1	CS_2	1		

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

VI. Surrogate Spikes

GC/MS

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

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

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

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

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

3 ***Evaluate Surrogate Recoveries.***

YES NO
a. [X] [ ] Check that reanalyses were performed as required.
b. [X] [ ] Check that surrogate recoveries in blanks met criteria.

4. ***Evaluate Reanalyses.***

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

Comments:
None - No re-analysis required.

VII. Matrix Spikes/Matrix Spike Duplicates

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

1. ***Verify Frequency***

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

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

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

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

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

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

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

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

Compound	µg/kg Orig. Result	µg/kg MS Result	µg/kg MSD Result	%RSD
Acetone	12.56	57.24	64.10	N/A
Carbon Disulfide	2.86	50.38	40.37	N/A
m and p - xylene	1.76	92.72	78.99	N/A

Comments:
1,1 - Dichloroethane was outside limits for %RPD.
Sample precision could not be determined because the MS and MSD were spiked with the complete standard instead of the 5 matrix compounds.

X. Internal Standards

GC/MS

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

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

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

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

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

3. ***Evaluate Reanalyses.***

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

Comments:

The wrong IS was used in all of the samples. Pentafluorobenzene was used instead of ~~1,4~~ Bromochloromethane. Re-analysis due to IS's %R is not required.

XI. Target Compound Identification

GC/MS

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

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

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

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

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

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

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

4. ***Evaluate Chromatograms.***

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

Comments:

None

XII. Compound Quantitation and Reported CRQLs

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

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

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

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

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

3. ***Evaluate CRQLs.***

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

Comments:
The wrong IS was used for quantitation for the 1st IS in all of the samples.

XIII. Tentatively Identified Compounds

GC/MS Only

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

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

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

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

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

3. ***Evaluate Blanks.***

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

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

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

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

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

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

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

XIII. TICs continued

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

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

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

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

9. ***Verify that internal standards and surrogates are not searched.***

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

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

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

Comments:
None

XIV. GC/MS System Performance

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

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

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

Comments:
None

XV. Overall Assessment of Data

Evaluate the Overall Quality of the Data.

YES	NO	
[X]	[ ]	Evaluate any technical problems which have not been previously addressed.
[X]	[ ]	Review all available materials to assess the overall quality of the dada, keeping in mind the additive nature of analytical problems.
[X]	[ ]	If appropriate information is available, assess the usability of the data to assist the data user in avoiding inappropriate use of the data. Review all available information, including the QAPjP, SAP, and communications with the data user that concerns the intended use of the data.

Provide a brief narrative to give the data user an indication of the analytical limitations of the data. Include any details from the above checks. Any inconsistency of the data with the Case Narrative should be noted. If sufficient information is available, the reviewer should give an assessment of the usability of the data within the given context.

VOLATILE CALIBRATION OUTLIERS SDG - D903865

Lab Name: IEPA - Organic Lab. Case: Granite City Ditch

Instrument #	Minimum	Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
DATE/TIME:	RRF	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q
					3-25-99			4-13-99			4-14-99			4-21-99		
Chloromethane	0.010															
Bromomethane	0.100	0.090	26.7	—	0.095	—	—	0.016	82.2	R						
Vinyl Chloride	0.100															
Chloroethane	0.010															
Methylene Chloride	0.010															
Acetone	0.010															
Carbon Disulfide	0.010															
1,1-Dichloroethene	0.100															
1,1-Dichloroethane	0.200															
1,2-Dichloroethene (total)	0.010															
Chloroform	0.200															
1,2-Dichloroethane	0.100															
2-Butanone	0.010															
1,1,1-Trichloroethane	0.100															
Carbon Tetrachloride	0.100															
Bromodichloromethane	0.200															
1,2-Dichloropropane	0.010															
1,[illegible]chloropropene	0.200															
Trichloroethene	0.300															
Dibromochloromethane	0.100															
1,1,2-Trichloroethane	0.100															
Benzene	0.500															
trans-1,3-Dichloropropene	0.100															
Bromoform	0.100															
4-Methyl-2-Pentanone	0.010															
2-Hexanone	0.010															
Tetrachloroethene	0.200															
1,1,2,2-Tetrachloroethane	0.500	0.425	—	—												
Toluene	0.400															
Chlorobenzene	0.500															
Ethylbenzene	0.100															
Styrene	0.300															
Xylene(total)	0.300															
Toluene-d8	0.010															
Bromofluorobenzene	0.200															
1,2-Dichloroethane-d4	0.010															

AFFECTED SAMPLES:

	VBLKSL1	VBLKSL2	VBLKSL3
	X208	X202	X209MS
	X207	X201	X209 MSD
	X206		
	X205		
	X204		
	X203		
	X209		

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: _____

SUBJECT: Review of Data
Received for Review on May 20, 1999

FROM: Stephen L. Ostrodka, Chief (SRT-4J) for Steve Ostrodka Richard L Byrne 6/1/99
Superfund Technical Support Section

TO: Data User: IEPA

We have reviewed the data for the following case:

SITE NAME: Granite City Ditch (IL)

CASE NUMBER: 26926 SDG NUMBER: ECCY8

Number and Type of Samples: 17 SOIL/WATER

Sample Numbers: ECCY8-9, EBSL6-7, ECCZ0, ECDD9, ECDE0-4, ECDF1-3, ECDG6-8

Laboratory: ATAS Hrs. for Review: 18 + 1.5 [illegible]

Following are our findings:
the data are acceptable and usable with the qualifications described in the attached narrative.
Richard L Byrne

RECEIVED
JUN 09 1999
IEPA-BOL-FSRS

CC: Regional TPO
Cecilia Moore
SM-5J

Case Number :26926 **SDG Number: ECCY8**
Site Name: Granite City Ditch (IL) **Laboratory: ATAS**

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Seventeen soil/water samples, numbered ECCY8-9, EBSL6-7, ECCZ0, ECDD9, ECDE0-4, ECDF1-3, ECDG6-8, were collected on April 12th and 13th, 1999. The lab received the samples on April 13th and 14th, 1999 in good condition. All water samples were analyzed for the full list of organic analytes except for EBSL7, the trip blank, which was analyzed only for volatile organics. The soil samples were only analyzed for semi-volatiles and pesticide/PCBs. All were analyzed according to CLP SOW OLMO3.2 3/90.

Reviewed By: M. Kaminsky Lockheed Martin/ESAT
Date: May 25, 1999

Case Number :26926 SDG Number: ECCY8
Site Name: Granite City Ditch (IL) Laboratory: ATAS

1. **HOLDING TIME**
No problems found for this qualification.

2. **GC/MS TUNING AND GC INSTRUMENT PERFORMANCE**
No problems found for this qualification.

3. **CALIBRATION**
The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

Acetone
EBSL6, EBSL7, ECCY8, ECCY9, ECCZ0, ECDD9
ECDE0, ECDE1, ECDE1MS, ECDE1MSD, VBLKCK

2-Butanone, 2-Hexanone
EBSL6, EBSL7, ECCY8, ECCY9, ECCZ0, ECDD9
ECDE0, ECDE1, ECDE1MS, ECDE1MSD, VBLKCK, VBLKCL
VHBLKCL

4-Methyl-2-Pentanone
VBLKCL, VHBLKCL

The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

4-Nitroaniline, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene
EBSL6, ECCY8, ECCY9, ECCZ0, ECDD9, ECDE0
ECDE1, ECDE1MS, ECDE1MSD, SBLKAS

4. **BLANKS**
The following semivolatile samples have analyte concentrations reported above the CRQL and less than or equal to ten times (10X) the associated method blank concentration.
Hits are qualified "U" and non-detects are not flagged.
Results are biased high.

ECDE1MS, ECDE2, ECDE2MSD, ECDG6DL, ECDG7, ECDG8
bis(2-Ethylhexyl)phthalate

The following semivolatile samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Reported sample

Case Number :26926 **SDG Number: ECCY8**
Site Name: Granite City Ditch (IL) **Laboratory: ATAS**

concentrations have been elevated to the CRQL.
Hits are qualified "U" and non-detects are not flagged.

bis(2-Ethylhexyl)phthalate
ECCY9, ECDD9, ECDE0, ECDE1MSD, ECDE3DL, ECDF1
ECDF2, ECDF3, ECDG7DL, ECDG8DL

Di-n-octylphthalate
ECDE2, ECDE2MS, ECDE2MSD, ECDE3, ECDE3DL, ECDE4
ECDE4DL, ECDF1, ECDF2, ECDF3, ECDG6, ECDG6DL
ECDG7, ECDG7DL, ECDG8, ECDG8DL

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

The following pesticide samples have surrogate percent recoveries which exceed the upper limit of the criteria window.
Hits are qualified "J" and non-detects are not flagged.

ECDE2MS, ECDE2MSD, ECDE3, ECDE4, ECDG6, ECDG7
ECDG8

The following pesticide samples have surrogate percent recoveries outside the lower limit of the criteria window, but greater than 10%. Hits are qualified "J" and non-detects are qualified "UJ".
Results are biased low.

ECDE1, ECDE2

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

No problems found for this qualification.

7. FIELD BLANK AND FIELD DUPLICATE

Sample EBSL7 was a trip blank, It was found to contain methylene chloride and one TIC . Sample EBSL6 was the field blank. It was found to contain in the volatile fraction methylene chloride and 2 TICs, in the semi-volatile fraction no TCLs and one TIC and in the pesticide/PCB fraction no TCLs. Results are not qualified based upon the results of the field blank.

8. INTERNAL STANDARDS

The following semivolatile samples have internal standard area counts that are outside the upper limit of primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

ECDE2MSD
Phenol, bis(2-Chloroethyl)ether, 2-Chlorophenol, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 2-Methylphenol,

Reviewed By: M. Kaminsky Lockheed Martin/ESAT
Date: May 25, 1999

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2,2'-oxybis(1-Chloropropane), 4-Methylphenol, N-Nitroso-di-n-propylamine, Hexachloroethane, Nitrobenzene, Isophorone, 2-Nitrophenol, 2,4-Dimethylphenol, bis(2-Chloroethoxy)methane, 2,4-Dichlorophenol, 1,2,4-Trichlorobenzene, Naphthalene, 4-Chloroaniline, Hexachlorobutadiene, 4-Chloro-3-methylphenol, 2-Methylnaphthalene, Hexachlorocyclopentadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2-Chloronaphthalene, 2-Nitroaniline, Dimethylphthalate, Acenaphthylene, 2,6-Dinitrotoluene, 3-Nitroaniline, Acenaphthene, 2,4-Dinitrophenol, 4-Nitrophenol, Dibenzofuran, 2,4-Dinitrotoluene, Diethylphthalate, 4-Chlorophenyl-phenylether, Fluorene, 4-Nitroaniline, 4,6-Dinitro-2-methylphenol, N-Nitrosodiphenylamine (1), Bromophenyl-phenylether, Hexachlorobenzene, Pentachlorophenol, Phenanthrene, Anthracene, Carbazole, Di-n-butylphthalate, Fluoranthene

ECDE3, ECDG8
Phenol, bis(2-Chloroethyl)ether, 2-Chlorophenol, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 2-Methylphenol, 2,2'-oxybis(1-Chloropropane), 4-Methylphenol, N-Nitroso-di-n-propylamine, Hexachloroethane, Nitrobenzene, Isophorone, 2-Nitrophenol, 2,4-Dimethylphenol, bis(2-Chloroethoxy)methane, 2,4-Dichlorophenol, 1,2,4-Trichlorobenzene, Naphthalene, 4-Chloroaniline, Hexachlorobutadiene, 4-Chloro-3-methylphenol, 2-Methylnaphthalene, Hexachlorocyclopentadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2-Chloronaphthalene, 2-Nitroaniline, Dimethylphthalate, Acenaphthylene, 2,6-Dinitrotoluene, 3-Nitroaniline, Acenaphthene, 2,4-Dinitrophenol, 4-Nitrophenol, Dibenzofuran, 2,4-Dinitrotoluene, Diethylphthalate, 4-Chlorophenyl-phenylether, Fluorene, 4-Nitroaniline

ECDE4
Phenol, bis(2-Chloroethyl)ether, 2-Chlorophenol, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 2-Methylphenol, 2,2'-oxybis(1-Chloropropane), 4-Methylphenol, N-Nitroso-di-n-propylamine, Hexachloroethane, Nitrobenzene, Isophorone, 2-Nitrophenol, 2,4-Dimethylphenol, bis(2-Chloroethoxy)methane, 2,4-Dichlorophenol, 1,2,4-Trichlorobenzene, Naphthalene, 4-Chloroaniline, Hexachlorobutadiene, 4-Chloro-3-methylphenol, 2-Methylnaphthalene, ECDG6, Phenol, bis(2-Chloroethyl)ether, 2-Chlorophenol, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 2-Methylphenol, 2,2'-oxybis(1-Chloropropane), 4-Methylphenol, N-Nitroso-di-n-propylamine, Hexachloroethane, Nitrobenzene, Isophorone, 2-Nitrophenol, 2,4-Dimethylphenol,

Reviewed By: M. Kaminsky Lockheed Martin/ESAT
Date: May 25, 1999

Case Number :26926 **SDG Number: ECCY8**
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bis(2-Chloroethoxy)methane, 2,4-Dichlorophenol, 1,2,4-Trichlorobenzene, Naphthalene, 4-Chloroaniline, Hexachlorobutadiene, 4-Chloro-3-methylphenol, 2-Methylnaphthalene

ECDG7
Phenol, bis(2-Chloroethyl)ether, 2-Chlorophenol, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 2-Methylphenol, 2,2'-oxybis(1-Chloropropane), 4-Methylphenol, N-Nitroso-di-n-propylamine, Hexachloroethane, Nitrobenzene, Isophorone, 2-Nitrophenol, 2,4-Dimethylphenol, bis(2-Chloroethoxy)methane, 2,4-Dichlorophenol, 1,2,4-Trichlorobenzene, Naphthalene, 4-Chloroaniline, Hexachlorobutadiene, 4-Chloro-3-methylphenol, 2-Methylnaphthalene

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA, SVOA, and Pesticide/PCB compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

EBSL6, EBSL7, ECCY8,ECCY9,ECCZ0, ECDD9, ECDE0, ECDE1, ECDE1MS, ECDE1MSD, VBLKCL, VHBLKCL
Methylene Chloride

The following semivolatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

~~ECCY9, ECDD9, ECDE0, ECDE1MSD~~ RYB 6/1/99
~~bis(2-Ethylhexyl)phthalate~~

ECDE2
Acenaphthene, Dibenzofuran, Fluorene, Anthracene
Carbazole, ~~Di-n-octylphthalate,~~ RYB 6/1/99 Dibenz(a,h)anthracene

ECDE2MS, ECDE2MSD
2-Methylnaphthalene, Fluorene, Anthracene, Carbazole
Butylbenzylphthalate, ~~Di-n-octylphthalate,~~ RYB 6/1/99 Dibenz(a,h)anthracene

ECDE3
4-Methylphenol, Naphthalene, 2-Methylnaphthalene, Acenaphthylene
Acenaphthene, Dibenzofuran, Fluorene, Di-n-butylphthalate
Butylbenzylphthalate, ~~Di-n-octylphthalate~~ RYB 6/1/99

Reviewed By: M. Kaminsky Lockheed Martin/ESAT
Date: May 25, 1999

C-e Number :26926 **SDG Number: ECCY8**
S .e Name: Granite City Ditch (IL) **Laboratory: ATAS**

ECDE3DL
Naphthalene, 2-Methylnaphthalene, Acenaphthene, Dibenzofuran, Fluorene, Anthracene, Carbazole, Butylbenzylphthalate, ~~bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate,~~ RXB 6/1/99
Dibenz(a,h)anthracene

ECDE4
1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 4-Methylphenol, Naphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Dibenzofuran, Fluorene, Anthracene, Carbazole, Butylbenzylphthalate, ~~Di-n-octylphthalate~~ RXB 6/1/99

ECDE4DL
1,4-Dichlorobenzene, 1,2-Dichlorobenzene, oxybis(1-Chloropropane), Naphthalene, 2-Methylnaphthalene, Acenaphthene, Dibenzofuran, Fluorene, Anthracene, Carbazole, Butylbenzylphthalate, ~~Di-n-octylphthalate,~~ RXB 6/1/99 Dibenz(a,h)anthracene

ECDF1
Naphthalene, Phenanthrene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, ~~bis(2-Ethylhexyl)phthalate,~~ RXB 6/1/99 ~~Di-n-octylphthalate,~~ Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

ECDF2
Phenanthrene, Di-n-butylphthalate, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, ~~bis(2-Ethylhexyl)phthalate,~~ RXB 6/1/99 ~~Di-n-octylphthalate,~~ Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

ECDF3
Phenanthrene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, ~~bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate,~~ RXB 6/1/99 Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

ECDG6
1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 4-Methylphenol, Acenaphthene, Di-n-butylphthalate, Butylbenzylphthalate, ~~Di-n-octylphthalate~~ RXB 6/1/99

ECDG6DL
1,2-Dichlorobenzene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Dibenzofuran, Fluorene, Anthracene, Carbazole, Butylbenzylphthalate, ~~Di-n-octylphthalate~~, RXB 6/1/99 Dibenz(a,h)anthracene

ECDG7, ECDG8

Reviewed By: M. Kaminsky Lockheed Martin/ESAT
Date: May 25, 1999

Case Number :26926 **SDG Number: ECCY8**
Site Name: Granite City Ditch (IL) **Laboratory: ATAS**

4-Methylphenol, Acenaphthylene, Acenaphthene, Fluorene Carbazole, Butylbenzylphthalate, ~~Di-n-octylphthalate~~ RXB 6/1/99

ECDG7DL
4-Methylphenol, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Dibenzofuran, Fluorene, Carbazole, Butylbenzylphthalate, ~~bis(2-Ethylhexyl)phthalate,~~ ~~Di-n-octylphthalate~~, Dibenz(a,h)anthracene, 4-Methylphenol, Acenaphthylene, Acenaphthene, Fluorene, Carbazole, Butylbenzylphthalate, Di-n-octylphthalate RXB 6/1/99

ECDG8DL
4-Methylphenol, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Dibenzofuran, Fluorene, Carbazole, Butylbenzylphthalate, ~~bis(2-Ethylhexyl)phthalate,~~ ~~Di-n-octylphthalate,~~ Dibenz(a,h)anthracene RXB 6/1/99

SBLKAS
bis(2-Ethylhexyl)phthalate

SBLKFZ
bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate

The following pesticide samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

ECDE1
Endosulfan I

ECDE1MS
Endosulfan I, 4,4'-DDD

ECDE1MSD
4,4'-DDD

ECDE2
4,4'-DDE, 4,4'-DDD, 4,4'-DDT, alpha-Chlordane

ECDE2MS
Aldrin, Heptachlor epoxide, 4,4'-DDE, 4,4'-DDD

ECDE2MSD
Heptachlor epoxide, 4,4'-DDE

ECDE3
Heptachlor, Heptachlor epoxide, Dieldrin, 4,4'-DDE

Reviewed By: M. Kaminsky Lockheed Martin/ESAT
Date: May 25, 1999

Case Number :26926 SDG Number: ECCY8
Site Name: Granite City Ditch (IL) Laboratory: ATAS

4,4'-DDD, 4,4'-DDT, Methoxychlor

ECDE4
Aldrin, Heptachlor epoxide, 4,4'-DDE, 4,4'-DDD, 4,4'-DDT

ECDF1
Dieldrin, 4,4'-DDD, alpha-Chlordane, gamma-Chlordane

ECDF2
4,4'-DDD, 4,4'-DDT, Methoxychlor, alpha-Chlordane

ECDF3
Heptachlor epoxide, Dieldrin, 4,4'-DDE, 4,4'-DDD
4,4'-DDT, gamma-Chlordane

ECDG6
Endosulfan I, 4,4'-DDE, Endosulfan sulfate

ECDG7
alpha-BHC, Dieldrin, 4,4'-DDE, 4,4'-DDT, Endrin aldehyde

ECDG8
Heptachlor epoxide, Dieldrin, 4,4'-DDE, Endosulfan sulfate

The following pesticide samples have analytes for which the percent difference between column results exceeds primary criteria. Hits are qualified "J".

ECDE1
Endosulfan I

ECDE1MS
Endosulfan I, 4,4'-DDD

ECDE1MSD
4,4'-DDD

ECDE2
4,4'-DDE, 4,4'-DDD, 4,4'-DDT

ECDE2MS
gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide
Dieldrin, 4,4'-DDD

ECDE2MSD
gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin
4,4'-DDE, Endrin, 4,4'-DDD

Reviewed By: M. Kaminsky Lockheed Martin/ESAT
Date: May 25, 1999

Case Number :26926 **SDG Number: ECCY8**
Site Name: Granite City Ditch (IL) **Laboratory: ATAS**

ECDE3
Heptachlor, Heptachlor epoxide, Dieldrin, 4,4'-DDD
4,4'-DDT, Methoxychlor

ECDE4
Aldrin, Heptachlor epoxide, 4,4'-DDD, 4,4'-DDT

ECDF1
Dieldrin, 4,4'-DDD

ECDF2
4,4'-DDD, 4,4'-DDT, Methoxychlor

ECDF3
Heptachlor epoxide, Dieldrin, 4,4'-DDE, 4,4'-DDD
4,4'-DDT, gamma-Chlordane

ECDG6
Endosulfan I, 4,4'-DDD, Endosulfan sulfate, alpha-Chlordane

ECDG7
alpha-BHC, Dieldrin, 4,4'-DDD, 4,4'-DDT
Endrin aldehyde

ECDG8
Heptachlor epoxide, Dieldrin, 4,4'-DDD, Endosulfan sulfate

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance. The GC baseline for the pesticide analysis was acceptable.

12. ADDITIONAL INFORMATION

Semi-volatile sample ECDE3 had fluoranthene, pyrene, chrysene, benzo (k)fluoranthene, and benzo(a)pyrene over the calibration range, values for these compounds should be taken from the diluted sample. Semi-volatile sample ECDE4 had fluoranthene, pyrene, and bis(2-ethylhexyl)phhalate over the calibration range, values for these compounds should be taken from the diluted sample. Semi-volatile sample ECDG6 had napthalene, phenanthrene, fluoranthene, pyrene, benao(a)anthracene, chrysene, benzo(b)fluoranthene, benzo (k)fluoranthene, indeno(1,2,3-cd)pyrene, benzo(g,h,i)perylene, and benzo(a)pyrene over the calibration range, values for these compounds should be taken from the diluted sample. Semi-volatile sample ECDG7 had fluoranthene and pyrene over the calibration range, values for these compounds should be taken from the diluted sample. Semi-volatile sample ECDG8 had pyrene over the calibration range, the value for this compound should be taken from the diluted sample. PH data is on lab Form I.

Reviewed By: M. Kaminsky Lockheed Martin/ESAT
Date: May 25, 1999

Case Number :26926 **SDG Number: ECCY8**
S Name: Granite City Ditch (IL) **Laboratory: ATAS**

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The anlayte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present)
H	Sample result is estimated and biased high.
L	Sample result is estimated and biased low.

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The anlayte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present)
H	Sample result is estimated and biased high.
L	Sample result is estimated and biased low.

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Volatile Analysis Data - ECCZ0
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
75-05-8	ACETONITRILE	6.50	10.000	NJ
110-54-3	HEXANE	7.55	10.000	NJ
	UNKNOWN	18.61	11.000	J

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 1

Volatile Analysis Data - ECDE1
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
110-54-3	HEXANE	7.55	9.000	NJ
	UNKNOWN	18.60	9.000	J

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 2

Volatile Analysis Data - ECDD9
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
110-54-3	HEXANE	7.56	6.000	NJ

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 3

Volatile Analysis Data - ECDE0
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
110-54-3	HEXANE	7.57	7.000	NJ

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 4

Volatile Analysis Data - EBSL7
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
75-07-0	ACETALDEHYDE	3.60	28.000	NJ
110-54-3	HEXANE	7.54	8.000	NJ

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 5

Volatile Analysis Data - ECCY8
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8
LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
110-54-3	HEXANE	7.52	5.000	NJ

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 6

Volatile Analysis Data - EBSL6
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8
LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
110-54-3	HEXANE	7.54	8.000	NJ

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 7

Volatile Analysis Data - VBLKCL
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8
LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	6.35	5.000	J

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 8

Volatile Analysis Data - VHBLKCL
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8
LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
1066-40-6	SILANOL, TRIMETHYL-	8.50	10.000	NJ

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 9

Semivolatile Analysis Data - SBLKAS
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8
LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.86	5.000	J
100-51-6	BENZYL ALCOHOL	8.95	4.000	NJ
88-24-4	PHENOL, 2,2'-METHYLENEBIS[6-(1,1-	20.27	4.000	NJ

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 10

Semivolatile Analysis Data - ECCZ0
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q

Semivolatile Analysis Data - ECDE1
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
21400-25-9	1-PROPENE, 1,1,2-TRICHLORO-	7.94	3.000	NJ
	UNKNOWN	11.00	2.000	J

Semivolatile Analysis Data - ECCY8
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
21400-25-9	1-PROPENE, 1,1,2-TRICHLORO-	7.93	3.000	NJ
57-10-3	HEXADECANOIC ACID	16.61	56.000	NJ
112-80-1	OLEIC ACID	17.76	17.000	NJ
0-00-0	TRIDECANOL, 2-ETHYL-2-METHYL-	28.30	22.000	NJ

Semivolatile Analysis Data - ECCY9
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	19.80	3.000	J
0-00-0	TRIDECANOL, 2-ETHYL-2-METHYL-	20.35	6.000	J

Semivolatile Analysis Data - ECDD9
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
2233-00-3	1-PROPENE, 3,3,3-TRICHLORO-	7.93	2.000	NJ

Semivolatile Analysis Data - ECDE0
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8

LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.69	3.000	J
	UNKNOWN	15.11	2.000	J
314-40-9	BROMACIL	16.98	10.000	NJ

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 16

Semivolatile Analysis Data - EBSL6
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8

LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	19.72	4.000	J

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 17

Semivolatile Analysis Data - SBLKFZ
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8

LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.75	450.000	J
	UNKNOWN	5.81	69.000	J
	UNKNOWN	18.34	110.000	J

FILE NAME: ECCY8.SDG DATE: 05/19/99 TIME: 16:18 CADRE98 PAGE: 18

Semivolatile Analysis Data - ECDE3
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.59	3800.000	J
	UNKNOWN	6.22	4200.000	J
	UNKNOWN	6.79	1400.000	J
	UNKNOWN	6.94	4800.000	J
109-29-5	OXACYCLOHEPTADECAN-2-ONE	13.71	1700.000	NJ
57-10-3	HEXADECANOIC ACID	13.79	3400.000	NJ
203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRENE	14.18	980.000	NJ
612-94-2	NAPHTHALENE, 2-PHENYL-	14.39	1300.000	NJ
56554-35-9	9,17-OCTADECADIENAL, (Z)-	14.84	2000.000	NJ
57-11-4	OCTADECANOIC ACID	14.93	890.000	NJ
	UNKNOWN	17.58	660.000	J
	UNKNOWN	19.50	750.000	J
192-97-2	BENZO[E]PYRENE	19.76	2400.000	NJ
	UNKNOWN	20.19	1200.000	J
	UNKNOWN	21.24	1800.000	J
57-88-5	CHOLESTEROL	21.54	1300.000	NJ
	UNKNOWN	22.13	900.000	J
215-58-7	BENZO[B]TRIPHENYLENE	23.56	660.000	NJ
83-47-6	.GAMMA.-SITOSTEROL	23.95	1400.000	NJ
	UNKNOWN	24.60	700.000	J
	UNKNOWN	25.12	1300.000	J
	UNKNOWN	25.71	1000.000	J
	UNKNOWN	26.21	820.000	J

Semivolatile Analysis Data - ECDE4
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.59	1300.000	J
	UNKNOWN	6.22	1500.000	J
	UNKNOWN	6.80	2900.000	J
	UNKNOWN	6.93	3400.000	J
575-37-1	NAPHTHALENE, 1,7-DIMETHYL-	10.36	1200.000	NJ
2091-29-4	9-HEXADECENOIC ACID	13.70	920.000	NJ
57-10-3	HEXADECANOIC ACID	13.78	1500.000	NJ
1961-96-2	1H-INDENE, 1-PHENYL-	13.98	1700.000	NJ
	UNKNOWN	14.19	1100.000	J
	UNKNOWN	14.45	1800.000	J
243-17-4	11H-BENZO[B]FLUORENE	15.98	1200.000	NJ
	UNKNOWN	18.06	1700.000	J
192-97-2	BENZO[E]PYRENE	19.77	2100.000	J
	UNKNOWN	21.26	2400.000	J
	UNKNOWN	22.15	1200.000	J
	UNKNOWN	23.98	5100.000	J
	UNKNOWN	24.63	1500.000	J
	UNKNOWN	25.05	1400.000	J
	UNKNOWN	25.31	930.000	J
	UNKNOWN	25.72	1100.000	J
1058-61-3	STIGMAST-4-EN-3-ONE	26.23	1200.000	NJ

Semivolatile Analysis Data - ECDG6
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8

LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.77	6200.000	JB
	UNKNOWN	6.22	2300.000	J
	UNKNOWN	6.46	880.000	J
	UNKNOWN	6.81	3800.000	J
	UNKNOWN	6.94	4000.000	J
90-12-0	NAPHTHALENE, 1-METHYL-	9.62	1700.000	NJ
571-61-9	NAPHTHALENE, 1,5-DIMETHYL-	10.49	1500.000	NJ
1430-97-3	9H-FLUORENE, 2-METHYL-	12.70	980.000	NJ
486-25-9	9H-FLUOREN-9-ONE	12.97	930.000	NJ
132-65-0	DIBENZOTHIOPHENE	13.10	780.000	NJ
57-10-3	HEXADECANOIC ACID	13.78	1600.000	NJ
203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRENE	14.19	1300.000	NJ
	UNKNOWN	14.37	2000.000	J
	UNKNOWN	14.45	1200.000	J
3674-65-5	PHENANTHRENE, 2,3-DIMETHYL-	14.82	720.000	NJ
239-35-0	BENZO[B]NAPHTHO[2,1-D]THIOPHENE	16.84	1300.000	NJ
192-97-2	BENZO[E]PYRENE	19.78	3500.000	NJ
	UNKNOWN	21.26	3300.000	J
	UNKNOWN	24.61	1000.000	J

Semivolatile Analysis Data - ECDG7
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8

LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.59	2700.000	J
	UNKNOWN	6.22	2800.000	J
	UNKNOWN	6.49	590.000	J
	UNKNOWN	6.80	2400.000	J
	UNKNOWN	6.94	5100.000	J
90-12-0	NAPHTHALENE, 1-METHYL-	9.63	840.000	NJ
92-52-4	BIPHENYL	10.13	450.000	NJ
575-37-1	NAPHTHALENE, 1,7-DIMETHYL-	10.36	440.000	NJ
581-42-0	NAPHTHALENE, 2,6-DIMETHYL-	10.49	700.000	NJ
1730-37-6	9H-FLUORENE, 1-METHYL-	12.70	490.000	NJ
486-25-9	9H-FLUOREN-9-ONE	12.96	580.000	NJ
57-10-3	HEXADECANOIC ACID	13.78	840.000	NJ
779-02-2	ANTHRACENE, 9-METHYL-	13.98	960.000	NJ
832-69-9	PHENANTHRENE, 1-METHYL-	14.02	540.000	NJ
	UNKNOWN	14.19	800.000	J
612-94-2	NAPHTHALENE, 2-PHENYL-	14.40	690.000	NJ
192-97-2	BENZO[E]PYRENE	19.77	1400.000	NJ
	UNKNOWN	21.25	1800.000	J
	UNKNOWN	22.14	940.000	J

Semivolatile Analysis Data - ECDG8
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.59	2500.000	J
	UNKNOWN	6.22	2600.000	J
	UNKNOWN	6.49	550.000	J
	UNKNOWN	6.81	2400.000	J
	UNKNOWN	6.94	5000.000	J
90-12-0	NAPHTHALENE, 1-METHYL-	9.63	780.000	NJ
92-52-4	BIPHENYL	10.13	420.000	NJ
581-42-0	NAPHTHALENE, 2,6-DIMETHYL-	10.36	440.000	NJ
1430-97-3	9H-FLUORENE, 2-METHYL-	12.70	510.000	NJ
486-25-9	9H-FLUOREN-9-ONE	12.97	560.000	NJ
57-10-3	HEXADECANOIC ACID	13.78	790.000	NJ
	UNKNOWN	14.19	730.000	J
	UNKNOWN	14.40	620.000	J
238-84-6	11H-BENZO[A]FLUORENE	15.90	520.000	NJ
243-17-4	11H-BENZO[B]FLUORENE	15.98	720.000	NJ
	UNKNOWN	17.85	580.000	J
192-97-2	BENZO[E]PYRENE	19.77	1800.000	NJ
	UNKNOWN	22.14	990.000	J

Semivolatile Analysis Data - ECDE2
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.45	1300.000	J
	UNKNOWN	5.63	2500.000	J
	UNKNOWN	6.09	2500.000	J
	UNKNOWN	6.35	220.000	J
	UNKNOWN	6.64	910.000	J
	UNKNOWN	6.79	4400.000	J
544-63-8	TETRADECANOIC ACID	12.39	280.000	NJ
2091-29-4	9-HEXADECENOIC ACID	13.57	470.000	NJ
57-10-3	HEXADECANOIC ACID	13.65	880.000	NJ
203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRENE	14.04	300.000	NJ
	UNKNOWN	14.19	300.000	J
84-65-1	9,10-ANTHRACENEDIONE	14.31	460.000	NJ
	UNKNOWN	15.16	510.000	J
2381-21-7	PYRENE, 1-METHYL-	15.57	200.000	NJ
82-05-3	7H-BENZ[DE]ANTHRACEN-7-ONE	16.50	360.000	NJ
	UNKNOWN	16.75	200.000	J
192-97-2	BENZO[E]PYRENE	19.47	1100.000	NJ
	UNKNOWN	21.19	460.000	J
	UNKNOWN	21.72	480.000	J
	UNKNOWN	24.72	550.000	J
	UNKNOWN	25.58	410.000	J

Semivolatile Analysis Data - ECDF1
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8

LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.52	230.000	J
	UNKNOWN	5.64	4300.000	J
	UNKNOWN	6.09	1000.000	J
	UNKNOWN	6.26	330.000	J
	UNKNOWN	6.35	220.000	J
	UNKNOWN	6.63	390.000	J
	UNKNOWN	6.78	1800.000	J
	UNKNOWN	6.83	110.000	J
	UNKNOWN	7.03	120.000	J
	UNKNOWN	7.70	96.000	J
	UNKNOWN	7.74	95.000	J
1526-17-6	2-FLUORO-6-NITROPHENOL	7.88	97.000	NJ
57-10-3	HEXADECANOIC ACID	13.64	150.000	NJ
	UNKNOWN	15.94	130.000	J
	UNKNOWN	17.48	300.000	J
	UNKNOWN	17.85	170.000	J

Semivolatile Analysis Data - ECDF2
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8

LABORATORY: ATAS,INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.64	4000.000	J
	UNKNOWN	6.02	120.000	J
	UNKNOWN	6.09	1800.000	J
	UNKNOWN	6.35	290.000	J
	UNKNOWN	6.64	580.000	J
	UNKNOWN	6.78	1900.000	J
	UNKNOWN	7.04	160.000	J
	UNKNOWN	7.73	240.000	J
1526-17-6	2-FLUORO-6-NITROPHENOL	7.89	150.000	NJ
0-00-0	PHENOL, 2-FLUORO-4-NITRO-	9.40	120.000	NJ
	UNKNOWN	12.71	140.000	J
	UNKNOWN	14.31	140.000	J
	UNKNOWN	16.37	250.000	J
	UNKNOWN	16.50	360.000	J
	UNKNOWN	18.17	150.000	J
	UNKNOWN	18.90	300.000	J
	UNKNOWN	20.35	230.000	J

Semivolatile Analysis Data - ECDF3
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.49	600.000	J
	UNKNOWN	5.64	3700.000	J
	UNKNOWN	6.09	1600.000	J
	UNKNOWN	6.35	310.000	J
	UNKNOWN	6.64	620.000	J
	UNKNOWN	6.79	2100.000	J
	UNKNOWN	7.04	160.000	J
	UNKNOWN	7.70	100.000	J
1526-17-6	2-FLUORO-6-NITROPHENOL	7.89	130.000	NJ
	UNKNOWN	8.94	110.000	J
0-00-0	PHENOL, 2-FLUORO-4-NITRO-	9.41	140.000	NJ
	UNKNOWN ALAKNE	12.02	120.000	J
57-10-3	HEXADECANOIC ACID	13.65	160.000	NJ
	UNKNOWN	15.12	240.000	J
	UNKNOWN	16.31	120.000	J
6765-39-5	1-HEPTADECENE	16.49	540.000	NJ
	UNKNOWN	17.86	130.000	J
	UNKNOWN	17.97	140.000	J
	UNKNOWN	18.90	330.000	J
	UNKNOWN	23.52	320.000	J

Semivolatile Analysis Data - ECDE3DL
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.46	3600.000	JD
	UNKNOWN	5.63	4300.000	JD
	UNKNOWN	6.08	5000.000	JD
	UNKNOWN	6.63	1600.000	JD
	UNKNOWN	6.79	8100.000	JD
	UNKNOWN	6.84	980.000	JD
2091-29-4	9-HEXADECENOIC ACID	13.57	800.000	NJD
57-10-3	HEXADECANOIC ACID	13.64	2400.000	NJD
613-12-7	ANTHRACENE, 2-METHYL-	13.87	1000.000	NJD
	UNKNOWN	14.04	960.000	JD
84-65-1	9,10-ANTHRACENEDIONE	14.32	840.000	NJD
60-33-3	9,12-OCTADECADIENOIC ACID (Z,Z)-	14.70	970.000	NJD
57-11-4	OCTADECANOIC ACID	14.79	1100.000	NJD
	UNKNOWN	15.47	840.000	JD
36237-66-8	6,10,14-HEXADECATRIEN-1-OL, 3,7,1	18.17	1000.000	NJD
192-97-2	BENZO[E]PYRENE	19.48	2400.000	NJD
	UNKNOWN	19.92	810.000	JD
	UNKNOWN	20.90	1700.000	JD
57-88-5	CHOLESTEROL	21.19	1700.000	NJD
	UNKNOWN	21.75	810.000	JD

Semivolatile Analysis Data - ECDG6DL
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8

LABORATORY: ATAS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.64	6100.000	JD
	UNKNOWN	6.09	2600.000	JD
	UNKNOWN	6.63	3200.000	JD
	UNKNOWN	6.78	6800.000	JD
90-12-0	NAPHTHALENE, 1-METHYL-	9.48	1300.000	NJD
575-37-1	NAPHTHALENE, 1,7-DIMETHYL-	10.23	1000.000	NJD
581-40-8	NAPHTHALENE, 2,3-DIMETHYL-	10.36	1800.000	NJD
2245-38-7	NAPHTHALENE, 1,6,7-TRIMETHYL-	11.34	840.000	NJD
2131-42-2	NAPHTHALENE, 1,4,6-TRIMETHYL-	11.47	1000.000	NJD
30995-64-3	METHYLDIBENZOTHIOPHENE	13.59	990.000	NJD
832-64-4	PHENANTHRENE, 4-METHYL-	13.87	2000.000	NJD
203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRENE	14.04	1300.000	NJD
612-94-2	NAPHTHALENE, 2-PHENYL-	14.24	2600.000	NJD
	UNKNOWN	14.31	1800.000	JD
	UNKNOWN	15.83	2300.000	JD
	UNKNOWN	18.18	1100.000	JD
192-97-2	BENZO[E]PYRENE	19.49	6600.000	NJD
	UNKNOWN	20.91	5300.000	JD
	UNKNOWN	21.75	3600.000	JD

Semivolatile Analysis Data - ECDE4DL
Tentatively Identified Compounds

CASE NO: 26926
SDG NO: ECCY8

LABORATORY: ATAS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.64	3900.000	JD
	UNKNOWN	6.10	1400.000	JD
	UNKNOWN	6.64	2100.000	JD
	UNKNOWN	6.79	2800.000	JD
90-12-0	NAPHTHALENE, 1-METHYL-	9.49	820.000	NJD
581-40-8	NAPHTHALENE, 2,3-DIMETHYL-	10.37	970.000	NJD
	UNKNOWN	11.99	890.000	JD
	UNKNOWN	13.59	1000.000	JD
57-10-3	HEXADECANOIC ACID	13.66	880.000	NJD
84-65-1	9,10-ANTHRACENEDIONE	14.32	1800.000	NJD
238-84-6	11H-BENZO[A]FLUORENE	15.82	1200.000	NJD
0-00-0	ACETAMIDE, N-METHYL-N-[4-[4-METHO	16.70	1200.000	NJD
	UNKNOWN	17.88	1800.000	JD
192-97-2	BENZO[E]PYRENE	19.50	1400.000	NJD
	UNKNOWN	21.76	890.000	JD
83-47-6	.GAMMA.-SITOSTEROL	23.54	2900.000	NJD
	UNKNOWN	24.12	1300.000	JD
	UNKNOWN	24.32	820.000	JD
1058-61-3	STIGMAST-4-EN-3-ONE	25.63	660.000	NJD

Semivolatile Analysis Data - ECDG7DL
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.47	1900.000	JD
	UNKNOWN	5.64	4000.000	JD
	UNKNOWN	6.09	2200.000	JD
	UNKNOWN	6.36	580.000	JD
	UNKNOWN	6.64	2000.000	JD
	UNKNOWN	6.80	4800.000	JD
90-12-0	NAPHTHALENE, 1-METHYL-	9.48	360.000	NJD
92-52-4	BIPHENYL	9.99	350.000	NJD
581-42-0	NAPHTHALENE, 2,6-DIMETHYL-	10.23	430.000	NJD
581-40-8	NAPHTHALENE, 2,3-DIMETHYL-	10.36	730.000	NJD
2245-38-7	NAPHTHALENE, 1,6,7-TRIMETHYL-	11.34	340.000	NJD
2131-42-2	NAPHTHALENE, 1,4,6-TRIMETHYL-	11.48	420.000	NJD
	UNKNOWN	12.72	520.000	JD
486-25-9	9H-FLUOREN-9-ONE	12.81	500.000	NJD
613-12-7	ANTHRACENE, 2-METHYL-	13.88	1300.000	NJD
	UNKNOWN	14.05	750.000	JD
82-05-3	7H-BENZ[DE]ANTHRACEN-7-ONE	16.51	1000.000	NJD
239-35-0	BENZO[B]NAPHTHO[2,1-D]THIOPHENE	16.69	1200.000	NJD
	UNKNOWN	18.18	860.000	JD
192-97-2	BENZO[E]PYRENE	19.51	3000.000	NJD
	UNKNOWN	21.77	1300.000	JD

Semivolatile Analysis Data - ECDG8DL
Tentatively Identified Compounds

CASE NO: 26926 LABORATORY: ATAS,INC.
SDG NO: ECCY8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	5.46	2100.000	JD
	UNKNOWN	5.64	4500.000	JD
	UNKNOWN	6.10	1900.000	JD
	UNKNOWN	6.36	580.000	JD
	UNKNOWN	6.65	1700.000	JD
	UNKNOWN	6.79	4600.000	JD
581-40-8	NAPHTHALENE, 2,3-DIMETHYL-	10.36	790.000	NJD
	UNKNOWN	11.83	480.000	JD
	UNKNOWN	12.41	510.000	JD
	UNKNOWN	12.72	700.000	JD
486-25-9	9H-FLUOREN-9-ONE	12.82	620.000	NJD
203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRENE	14.05	1000.000	NJD
35465-71-5	2-PHENYLNAPHTHALENE	14.25	970.000	NJD
243-17-4	11H-BENZO[B]FLUORENE	15.58	460.000	NJD
2381-21-7	PYRENE, 1-METHYL-	15.75	530.000	NJD
238-84-6	11H-BENZO[A]FLUORENE	15.83	970.000	NJD
	UNKNOWN	16.03	500.000	JD
192-97-2	BENZO[E]PYRENE	19.51	2100.000	NJD
	UNKNOWN	21.77	1000.000	JD

Analytical Results (Qualified Data) Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH
Lab. : ATAS
Reviewer:
Date:

Number of Soil Samples : 0
Number of Water Samples : 8

Sample Number:	EBSL6		EBSL7		ECCY8		ECCY9		ECCZ0	
Sampling Location:	FIELD BLANK		TRIP BLANK		S104		S105		S106	
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled:	04/13/99		04/13/99		04/12/99		04/12/99		04/12/99	
Time Sampled:			10:15		11:50		11:50		09:45	
%Moisture:										
PH:										
Dilution Factor:	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Chloromethane	10	U	10	U	10	U	10	U	10	U
Bromomethane	10	U	10	U	10	U	10	U	10	U
Vinyl Chloride	10	U	10	U	10	U	10	U	10	U
Chloroethane	10	U	10	U	10	U	10	U	10	U
Methylene Chloride	5	J	7	J	4	J	3	J	6	J
Acetone	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
Carbon Disulfide	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethene	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethane	10	U	10	U	10	U	10	U	10	U
Total 1,2-Dichloroethene	10	U	10	U	10	U	10	U	10	U
Chloroform	10	U	10	U	10	U	10	U	10	U
1,2-Dichloroethane	10	U	10	U	10	U	10	U	10	U
2-Butanone	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
1,1,1-Trichloroethane	10	U	10	U	10	U	10	U	10	U
Carbon Tetrachloride	10	U	10	U	10	U	10	U	10	U
Bromodichloromethane	10	U	10	U	10	U	10	U	10	U
1,2-Dichloropropane	10	U	10	U	10	U	10	U	10	U
Cis-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U
Trichloroethene	10	U	10	U	10	U	10	U	10	U
Dibromochloromethane	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloroethane	10	U	10	U	10	U	10	U	10	U
Benzene	10	U	10	U	10	U	10	U	10	U
Trans-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U
Bromoform	10	U	10	U	10	U	10	U	10	U
4-Methyl-2-pentanone	10	U	10	U	10	U	10	U	10	U
2-Hexanone	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
Tetrachloroethene	10	U	10	U	10	U	10	U	10	U
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U	10	U	10	U
Toluene	10	U	10	U	10	U	10	U	10	U
Chlorobenzene	10	U	10	U	10	U	10	U	10	U
Ethylbenzene	10	U	10	U	10	U	10	U	10	U
Styrene	10	U	10	U	10	U	10	U	10	U
Xylene (total)	10	U	10	U	10	U	10	U	10	U

Analytical Results (Qualified Data) Page __ of __

Case #: 26926 SDG. ECCY8
Site: GRANITE CITY DITCH
Lab. : ATAS
Reviewer:
Date:

Sample Number:	ECDD9		ECDE0		ECDE1		ECDE1MS		ECDE1MSD	
Sampling Location:	S101		S102		S103		S103		S103	
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled:	04/13/99		04/13/99		04/12/99		04/12/99		04/12/99	
Time Sampled:	10:00		09:00		14:30		14:30		14:30	
%Moisture:										
PH:										
Dilution Factor:	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Chloromethane	10	U	10	U	10	U	10	U	10	U
Bromomethane	10	U	10	U	10	U	10	U	10	U
Vinyl Chloride	10	U	10	U	10	U	10	U	10	U
Chloroethane	10	U	10	U	10	U	10	U	10	U
Methylene Chloride	6	J	6	J	7	J	4	J	5	J
Acetone	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
Carbon Disulfide	10	U	10	U	10	U	10	U	10	U
1.1-Dichloroethene	10	U	10	U	10	U	49		47	
1.1-Dichloroethane	10	U	10	U	10	U	10	U	10	U
Total 1.2-Dichloroethene	10	U	10	U	10	U	10	U	10	U
Chloroform	10	U	10	U	10	U	10	U	10	U
1.2-Dichloroethane	10	U	10	U	10	U	10	U	10	U
2-Butanone	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
1.1.1-Trichloroethane	10	U	10	U	10	U	10	U	10	U
Carbon Tetrachloride	10	U	10	U	10	U	10	U	10	U
Bromodichloromethane	10	U	10	U	10	U	10	U	10	U
1.2-Dichloropropane	10	U	10	U	10	U	10	U	10	U
Cis-1.3-Dichloropropene	10	U	10	U	10	U	10	U	10	U
Trichloroethene	10	U	10	U	10	U	48		46	
Dibromochloromethane	10	U	10	U	10	U	10	U	10	U
1.1.2-Trichloroethane	10	U	10	U	10	U	10	U	10	U
Benzene	10	U	10	U	10	U	50		49	
Trans-1.3-Dichloropropene	10	U	10	U	10	U	10	U	10	U
Bromoform	10	U	10	U	10	U	10	U	10	U
4-Methyl-2-pentanone	10	U	10	U	10	U	10	U	10	U
2-Hexanone	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
Tetrachloroethene	10	U	10	U	10	U	10	U	10	U
1.1.2.2-Tetrachloroethane	10	U	10	U	10	U	10	U	10	U
Toluene	10	U	10	U	10	U	51		49	
Chlorobenzene	10	U	10	U	10	U	50		50	
Ethylbenzene	10	U	10	U	10	U	10	U	10	U
Styrene	10	U	10	U	10	U	10	U	10	U
Xylene (total)	10	U	10	U	10	U	10	U	10	U

Analytical Results (Qualified Data) Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH
Lab. : ATAS
Reviewer:
Date:

Sample Number:	VHBLKCL		VBLKCK		VBLKCL					
Sampling Location:										
Matrix:	Water		Water		Water					
Units:	ug/L		ug/L		ug/L					
Date Sampled:										
Time Sampled:										
%Moisture:										
PH:										
Dilution Factor:	1.0		1.0		1.0					
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Chloromethane	10	U	10	U	10	U				
Bromomethane	10	U	10	U	10	U				
Vinyl Chloride	10	U	10	U	10	U				
Chloroethane	10	U	10	U	10	U				
Methylene Chloride	5	J	10	U	5	J				
Acetone	10	U	10	UJ	10	U				
Carbon Disulfide	10	U	10	U	10	U				
1.1-Dichloroethene	10	U	10	U	10	U				
1.1-Dichloroethane	10	U	10	U	10	U				
Total 1.2-Dichloroethene	10	U	10	U	10	U				
Chloroform	10	U	10	U	10	U				
1.2-Dichloroethane	10	U	10	U	10	U				
2-Butanone	10	UJ	10	UJ	10	UJ				
1.1.1-Trichloroethane	10	U	10	U	10	U				
Carbon Tetrachloride	10	U	10	U	10	U				
Bromodichloromethane	10	U	10	U	10	U				
1.2-Dichloropropane	10	U	10	U	10	U				
Cis-1.3-Dichloropropene	10	U	10	U	10	U				
Trichloroethene	10	U	10	U	10	U				
Dibromochloromethane	10	U	10	U	10	U				
1.1.2-Trichloroethane	10	U	10	U	10	U				
Benzene	10	U	10	U	10	U				
Trans-1.3-Dichloropropene	10	U	10	U	10	U				
Bromoform	10	U	10	U	10	U				
4-Methyl-2-pentanone	10	UJ	10	U	10	UJ				
2-Hexanone	10	UJ	10	UJ	10	UJ				
Tetrachloroethene	10	U	10	U	10	U				
1.1.2.2-Tetrachloroethane	10	U	10	U	10	U				
Toluene	10	U	10	U	10	U				
Chlorobenzene	10	U	10	U	10	U				
Ethylbenzene	10	U	10	U	10	U				
Styrene	10	U	10	U	10	U				
Xylene (total)	10	U	10	U	10	U				

Analytical Results (Qualified Data) Page __ of __

Case #: 26926 SDG: ECCY8

Site: GRANITE CITY DITCH Number of Soil Samples : 9

Lab. : ATAS Number of Water Samples : 7

Reviewer.

Date:

Sample Number:	EBSL6		ECCY8		ECCY9		ECCZ0		ECDD9	
Sampling Location:	FIELD BLANK		S104		S105		S106		S101	
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled:	04/13/99		04/12/99		04/12/99		04/12/99		04/13/99	
Time Sampled:			11:50		11:50		09:45		10:00	
%Moisture:										
PH:	7.5		7.1		7.2		7.1		7.4	
Dilution Factor:	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Phenol	10	U	10	U	10	U	10	U	10	U
bis(2-Chloroethyl)ether	10	U	10	U	10	U	10	U	10	U
2-Chlorophenol	10	U	10	U	10	U	10	U	10	U
1,3-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U
1,4-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U
1,2-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U
2-Methylphenol	10	U	10	U	10	U	10	U	10	U
2,2'-oxybis(1-chloropropane	10	U	10	U	10	U	10	U	10	U
4-Methylphenol	10	U	10	U	10	U	10	U	10	U
N-Nitroso-di-n-propylamine	10	U	10	U	10	U	10	U	10	U
Hexachloroethane	10	U	10	U	10	U	10	U	10	U
Nitrobenzene	10	U	10	U	10	U	10	U	10	U
Isophorone	10	U	10	U	10	U	10	U	10	U
2-Nitrophenol	10	U	10	U	10	U	10	U	10	U
2,4-Dimethylphenol	10	U	10	U	10	U	10	U	10	U
bis(2-Chloroethoxy)methane	10	U	10	U	10	U	10	U	10	U
2,4-Dichlorophenol	10	U	10	U	10	U	10	U	10	U
1,2,4-Trichlorobenzene	10	U	10	U	10	U	10	U	10	U
Naphthalene	10	U	10	U	10	U	10	U	10	U
4-Chloroaniline	10	U	10	U	10	U	10	U	10	U
Hexachlorobutadiene	10	U	10	U	10	U	10	U	10	U
4-Chloro-3-methylphenol	10	U	10	U	10	U	10	U	10	U
2-Methylnaphthalene	10	U	10	U	10	U	10	U	10	U
Hexachlorocyclopentadiene	10	U	10	U	10	U	10	U	10	U
2,4,6-Trichlorophenol	10	U	10	U	10	U	10	U	10	U
2,4,5-Trichlorophenol	25	U	25	U	25	U	25	U	25	U
2-Chloronaphthalene	10	U	10	U	10	U	10	U	10	U
2-Nitroaniline	25	U	25	U	25	U	25	U	25	U
Dimethylphthalate	10	U	10	U	10	U	10	U	10	U
Acenaphthylene	10	U	10	U	10	U	10	U	10	U
2,6-Dinitrotoluene	10	U	10	U	10	U	10	U	10	U
3-Nitroaniline	25	U	25	U	25	U	25	U	25	U

Sample Number:	EBSL6		ECCY8		ECCY9		ECCZ0		ECD09	
Sampling Location:	FIELD BLANK		S104		S105		S106		S101	
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled:	04/13/99		04/12/99		04/12/99		04/12/99		04/13/99	
Time Sampled:			11:50		11:50		09:45		10:00	
%Moisture:										
PH.	7.5		7.1		7.2		7.1		7.4	
Dilution Factor:	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	10	U	10	U	10	U	10	U	10	U
2,4-Dinitrophenol	25	U	25	U	25	U	25	U	25	U
4-Nitrophenol	25	U	25	U	25	U	25	U	25	U
Dibenzofuran	10	U	10	U	10	U	10	U	10	U
2,4-Dinitrotoluene	10	U	10	U	10	U	10	U	10	U
Diethylphthalate	10	U	10	U	10	U	10	U	10	U
4-Chlorophenyl-phenylether	10	U	10	U	10	U	10	U	10	U
Fluorene	10	U	10	U	10	U	10	U	10	U
4-Nitroaniline	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ
4,6-Dinitro-2-methylphenol	25	U	25	U	25	U	25	U	25	U
N-Nitrosodiphenylamine	10	U	10	U	10	U	10	U	10	U
4-Bromophenyl-phenylether	10	U	10	U	10	U	10	U	10	U
Hexachlorobenzene	10	U	10	U	10	U	10	U	10	U
Pentachlorophenol	25	U	25	U	25	U	25	U	25	U
Phenanthrene	10	U	10	U	10	U	10	U	10	U
Anthracene	10	U	10	U	10	U	10	U	10	U
Carbazole	10	U	10	U	10	U	10	U	10	U
Di-n-butylphthalate	10	U	10	U	10	U	10	U	10	U
Fluoranthene	10	U	10	U	10	U	10	U	10	U
Pyrene	10	U	10	U	10	U	10	U	10	U
Butylbenzylphthalate	10	U	10	U	10	U	10	U	10	U
3,3'-Dichlorobenzidine	10	U	10	U	10	U	10	U	10	U
Benzo(a)anthracene	10	U	10	U	10	U	10	U	10	U
Chrysene	10	U	10	U	10	U	10	U	10	U
bis(2-Ethylhexyl)phthalate	10	U	10	U	10	U	10	U	10	U
Di-n-octylphthalate	10	U	10	U	10	U	10	U	10	U
Benzo(b)fluoranthene	10	U	10	U	10	U	10	U	10	U
Benzo(k)fluoranthene	10	U	10	U	10	U	10	U	10	U
Benzo(a)pyrene	10	U	10	U	10	U	10	U	10	U
Indeno(1,2,3-cd)pyrene	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
Dibenz(a,h)anthracene	10	U	10	U	10	U	10	U	10	U
Benzo(g,h,i)perylene	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ

Analytical Results (Qualified Data) Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH
Lab. : ATAS
Reviewer:
Date:

Sample Number:	ECDE0		ECDE1		ECDE1MS		ECDE1MSD		SBLKAS	
Sampling Location:	S102		S103		S103		S103			
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled:	04/13/99		04/12/99		04/12/99		04/12/99			
Time Sampled:	09:00		14:30		14:30		14:30			
%Moisture:										
PH:	9.8		7.3		7.3		7.3		7	
Dilution Factor:	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Phenol	10	U	10	U	40		42		10	U
bis(2-Chloroethyl)ether	10	U	10	U	10	U	10	U	10	U
2-Chlorophenol	10	U	10	U	40		44		10	U
1,3-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U
1,4-Dichlorobenzene	10	U	10	U	27		30		10	U
1,2-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U
2-Methylphenol	10	U	10	U	10	U	10	U	10	U
2,2'-oxybis(1-chloropropane	10	U	10	U	10	U	10	U	10	U
4-Methylphenol	10	U	10	U	10	U	10	U	10	U
N-Nitroso-di-n-propylamine	10	U	10	U	30		29		10	U
Hexachloroethane	10	U	10	U	10	U	10	U	10	U
Nitrobenzene	10	U	10	U	10	U	10	U	10	U
Isophorone	10	U	10	U	10	U	10	U	10	U
2-Nitrophenol	10	U	10	U	10	U	10	U	10	U
2,4-Dimethylphenol	10	U	10	U	10	U	10	U	10	U
bis(2-Chloroethoxy)methane	10	U	10	U	10	U	10	U	10	U
2,4-Dichlorophenol	10	U	10	U	10	U	10	U	10	U
1,2,4-Trichlorobenzene	10	U	10	U	28		30		10	U
Naphthalene	10	U	10	U	10	U	10	U	10	U
4-Chloroaniline	10	U	10	U	10	U	10	U	10	U
Hexachlorobutadiene	10	U	10	U	10	U	10	U	10	U
4-Chloro-3-methylphenol	10	U	10	U	44		45		10	U
2-Methylnaphthalene	10	U	10	U	10	U	10	U	10	U
Hexachlorocyclopentadiene	10	U	10	U	10	U	10	U	10	U
2,4,6-Trichlorophenol	10	U	10	U	10	U	10	U	10	U
2,4,5-Trichlorophenol	25	U	25	U	25	U	25	U	25	U
2-Chloronaphthalene	10	U	10	U	10	U	10	U	10	U
2-Nitroaniline	25	U	25	U	25	U	25	U	25	U
Dimethylphthalate	10	U	10	U	10	U	10	U	10	U
Acenaphthylene	10	U	10	U	10	U	10	U	10	U
2,6-Dinitrotoluene	10	U	10	U	10	U	10	U	10	U
3-Nitroaniline	25	U	25	U	25	U	25	U	25	U

Sample Number:	ECDE0		ECDE1		ECDE1MS		ECDE1MSD		SBLKAS	
Sampling Location:	S102		S103		S103		S103			
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled:	04/13/99		04/12/99		04/12/99		04/12/99			
Time Sampled:	09:00		14:30		14:30		14:30			
%Moisture:										
PH:	9.8		7.3		7.3		7.3		7	
Dilution Factor:	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	10	U	10	U	30		31		10	U
2,4-Dinitrophenol	25	U	25	U	25	U	25	U	25	U
4-Nitrophenol	25	U	25	U	35		41		25	U
Dibenzofuran	10	U	10	U	10	U	10	U	10	U
2,4-Dinitrotoluene	10	U	10	U	33		31		10	U
Diethylphthalate	10	U	10	U	10	U	10	U	10	U
4-Chlorophenyl-phenylether	10	U	10	U	10	U	10	U	10	U
Fluorene	10	U	10	U	10	U	10	U	10	U
4-Nitroaniline	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ
4,6-Dinitro-2-methylphenol	25	U	25	U	25	U	25	U	25	U
N-Nitrosodiphenylamine	10	U	10	U	10	U	10	U	10	U
4-Bromophenyl-phenylether	10	U	10	U	10	U	10	U	10	U
Hexachlorobenzene	10	U	10	U	10	U	10	U	10	U
Pentachlorophenol	25	U	25	U	51		51		25	U
Phenanthrene	10	U	10	U	10	U	10	U	10	U
Anthracene	10	U	10	U	10	U	10	U	10	U
Carbazole	10	U	10	U	10	U	10	U	10	U
Di-n-butylphthalate	10	U	10	U	10	U	10	U	10	U
Fluoranthene	10	U	10	U	10	U	10	U	10	U
Pyrene	10	U	10	U	42		38		10	U
Butylbenzylphthalate	10	U	10	U	10	U	10	U	10	U
3,3'-Dichlorobenzidine	10	U	10	U	10	U	10	U	10	U
Benzo(a)anthracene	10	U	10	U	10	U	10	U	10	U
Chrysene	10	U	10	U	10	U	10	U	10	U
bis(2-Ethylhexyl)phthalate	10	U	10	U	11	U	10	U	2	J
Di-n-octylphthalate	10	U	10	U	10	U	10	U	10	U
Benzo(b)fluoranthene	10	U	10	U	10	U	10	U	10	U
Benzo(k)fluoranthene	10	U	10	U	10	U	10	U	10	U
Benzo(a)pyrene	10	U	10	U	10	U	10	U	10	U
Indeno(1,2,3-cd)pyrene	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
Dibenz(a,h)anthracene	10	U	10	U	10	U	10	U	10	U
Benzo(g,h,i)perylene	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ

Analytical Results (Qualified Data) Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH
Lab. : ATAS
Reviewer:
Date:

Sample Number:	ECDE2		ECDE2MS		ECDE2MSD		ECDE3		ECDE3DL	
Sampling Location:	X201		X201		X201		X202		X202	
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units:	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
Date Sampled:	04/13/99		04/13/99		04/13/99		04/13/99		04/13/99	
Time Sampled:	10:00		10:00		10:00		09:00		09:00	
%Moisture:	33		33		33		51		51	
PH:	6.5		6.5		6.5		7.5		7.5	
Dilution Factor:	1.0		1.0		1.0		1.0		5.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Phenol	490	U	3200		3100	J	670	UJ	3400	U
bis(2-Chloroethyl)ether	490	U	490	U	490	UJ	670	UJ	3400	U
2-Chlorophenol	490	U	3200		3000	J	670	UJ	3400	U
1,3-Dichlorobenzene	490	U	490	U	490	UJ	670	UJ	3400	U
1,4-Dichlorobenzene	490	U	2100		1900	J	670	UJ	3400	U
1,2-Dichlorobenzene	490	U	490	U	490	UJ	670	UJ	3400	U
2-Methylphenol	490	U	490	U	490	UJ	670	UJ	3400	U
2,2'-oxybis(1-chloropropane	490	U	490	U	490	UJ	670	UJ	3400	U
4-Methylphenol	490	U	490	U	490	UJ	39	J	3400	U
N-Nitroso-di-n-propylamine	490	U	2600		2400	J	670	UJ	3400	U
Hexachloroethane	490	U	490	U	490	UJ	670	UJ	3400	U
Nitrobenzene	490	U	490	U	490	UJ	670	UJ	3400	U
Isophorone	490	U	490	U	490	UJ	670	UJ	3400	U
2-Nitrophenol	490	U	490	U	490	UJ	670	UJ	3400	U
2,4-Dimethylphenol	490	U	490	U	490	UJ	670	UJ	3400	U
bis(2-Chloroethoxy)methane	490	U	490	U	490	UJ	670	UJ	3400	U
2,4-Dichlorophenol	490	U	490	U	490	UJ	670	UJ	3400	U
1,2,4-Trichlorobenzene	490	U	2200		2100	J	670	UJ	3400	U
Naphthalene	490	U	490	U	490	UJ	210	J	200	J
4-Chloroaniline	490	U	490	U	490	UJ	670	UJ	3400	U
Hexachlorobutadiene	490	U	490	U	490	UJ	670	UJ	3400	U
4-Chloro-3-methylphenol	490	U	3000		2900	J	670	UJ	3400	U
2-Methylnaphthalene	490	U	27	J	490	UJ	240	J	230	J
Hexachlorocyclopentadiene	490	U	490	U	490	UJ	670	UJ	3400	U
2,4,6-Trichlorophenol	490	U	490	U	490	UJ	670	UJ	3400	U
2,4,5-Trichlorophenol	1200	U	1200	U	1200	UJ	1700	UJ	8500	U
2-Chloronaphthalene	490	U	490	U	490	UJ	670	UJ	3400	U
2-Nitroaniline	1200	U	1200	U	1200	UJ	1700	UJ	8500	U
Dimethylphthalate	490	U	490	U	490	UJ	670	UJ	3400	U
Acenaphthylene	490	U	490	U	490	UJ	57	J	3400	U
2,6-Dinitrotoluene	490	U	490	U	490	UJ	670	UJ	3400	U
3-Nitroaniline	1200	U	1200	U	1200	UJ	1700	UJ	8500	U

Sample Number:	ECDE2		ECDE2MS		ECDE2MSD		ECDE3		ECDE3DL	
Sampling Location:	X201		X201		X201		X202		X202	
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units:	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
Date Sampled:	04/13/99		04/13/99		04/13/99		04/13/99		04/13/99	
Time Sampled:	10:00		10:00		10:00		09:00		09:00	
%Moisture:										
PH:	6.5		6.5		6.5		7.5		7.5	
Dilution Factor:	1.0		1.0		1.0		1.0		5.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	71	J	2300		2200	J	380	J	380	J
2,4-Dinitrophenol	1200	U	1200	U	1200	UJ	1700	UJ	8500	U
4-Nitrophenol	1200	U	3400		3600	J	1700	UJ	8500	U
Dibenzofuran	42	J	490	U	490	UJ	280	J	250	J
2,4-Dinitrotoluene	490	U	2000		1900	J	670	UJ	3400	U
Diethylphthalate	490	U	490	U	490	UJ	670	UJ	3400	U
4-Chlorophenyl-phenylether	490	U	490	U	490	UJ	670	UJ	3400	U
Fluorene	91	J	62	J	56	J	360	J	380	J
4-Nitroaniline	1200	U	1200	U	1200	UJ	1700	UJ	8500	U
4,6-Dinitro-2-methylphenol	1200	U	1200	U	1200	UJ	1700	U	8500	U
N-Nitrosodiphenylamine	490	U	490	U	490	UJ	670	U	3400	U
4-Bromophenyl-phenylether	490	U	490	U	490	UJ	670	U	3400	U
Hexachlorobenzene	490	U	490	U	490	UJ	670	U	3400	U
Pentachlorophenol	1200	U	3300		3200	J	1700	U	8500	U
Phenanthrene	1300		1100		970	J	5200		5600	
Anthracene	290	J	260	J	220	J	1500		1400	J
Carbazole	190	J	140	J	150	J	850		880	J
Di-n-butylphthalate	490	U	490	U	34	J	130	J	3400	U
Fluoranthene	3100		2600		2500	J	9800		12000	
Pyrene	2600		5200		4700		9400		10000	
Butylbenzylphthalate	490		96	J	55	J	430	J	470	J
3,3'-Dichlorobenzidine	490	U	490	U	490	U	670	U	3400	U
Benzo(a)anthracene	1100		1100		1100		4900		4900	
Chrysene	1700		1700		1600		6700		7200	
bis(2-Ethylhexyl)phthalate	800	U	3300		970	U	2500		3400	U
Di-n-octylphthalate	490	U	490	U	490	U	670	U	3400	U
Benzo(b)fluoranthene	2000		1400		1500		5400		7000	
Benzo(k)fluoranthene	1600		1500		1300		6700		5700	
Benzo(a)pyrene	1600		1400		1300		5800		5200	
Indeno(1,2,3-cd)pyrene	1100		1000		1000		4400		3800	
Dibenz(a,h)anthracene	440	J	440	J	400	J	1900		1700	J
Benzo(g,h,i)perylene	1000		990		980		4300		3800	

Analytical Results (Qualified Data) Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH
Lab. : ATAS
Reviewer:
Date:

Sample Number:	ECDE4		ECDE4DL		ECDF1		ECDF2		ECDF3	
Sampling Location:	X203		X203		X207		X208		X209	
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units:	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
Date Sampled:	04/12/99		04/12/99		04/12/99		04/12/99		04/12/99	
Time Sampled:	16:00		16:00		11:50		10:45		09:45	
%Moisture:	60		60		28		28		29	
PH:	7.3		7.3		7.4		6.9		7.2	
Dilution Factor:	1.0		2.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Phenol	820	UJ	1600	U	460	U	460	U	460	U
bis(2-Chloroethyl)ether	820	UJ	1600	U	460	U	460	U	460	U
2-Chlorophenol	820	UJ	1600	U	460	U	460	U	460	U
1,3-Dichlorobenzene	820	UJ	1600	U	460	U	460	U	460	U
1,4-Dichlorobenzene	150	J	110	J	460	U	460	U	460	U
1,2-Dichlorobenzene	330	J	240	J	460	U	460	U	460	U
2-Methylphenol	820	UJ	1600	U	460	U	460	U	460	U
2,2'-oxybis(1-chloropropane	820	UJ	170	J	460	U	460	U	460	U
4-Methylphenol	70	J	1600	U	460	U	460	U	460	U
N-Nitroso-di-n-propylamine	820	UJ	1600	U	460	U	460	U	460	U
Hexachloroethane	820	UJ	1600	U	460	U	460	U	460	U
Nitrobenzene	820	UJ	1600	U	460	U	460	U	460	U
Isophorone	820	UJ	1600	U	460	U	460	U	460	U
2-Nitrophenol	820	UJ	1600	U	460	U	460	U	460	U
2,4-Dimethylphenol	820	UJ	1600	U	460	U	460	U	460	U
bis(2-Chloroethoxy)methane	820	UJ	1600	U	460	U	460	U	460	U
2,4-Dichlorophenol	820	UJ	1600	U	460	U	460	U	460	U
1,2,4-Trichlorobenzene	820	UJ	1600	U	460	U	460	U	460	U
Naphthalene	250	J	220	J	36	J	460	U	460	U
4-Chloroaniline	820	UJ	1600	U	460	U	460	U	460	U
Hexachlorobutadiene	820	UJ	1600	U	460	U	460	U	460	U
4-Chloro-3-methylphenol	820	UJ	1600	U	460	U	460	U	460	U
2-Methylnaphthalene	710	J	610	J	460	U	460	U	460	U
Hexachlorocyclopentadiene	820	U	1600	U	460	U	460	U	460	U
2,4,6-Trichlorophenol	820	U	1600	U	460	U	460	U	460	U
2,4,5-Trichlorophenol	2100	U	4200	U	1200	U	1200	U	1200	U
2-Chloronaphthalene	820	U	1600	U	460	U	460	U	460	U
2-Nitroaniline	2100	U	4200	U	1200	U	1200	U	1200	U
Dimethylphthalate	820	U	1600	U	460	U	460	U	460	U
Acenaphthylene	63	J	1600	U	460	U	460	U	460	U
2,6-Dinitrotoluene	820	U	1600	U	460	U	460	U	460	U
3-Nitroaniline	2100	U	4200	U	1200	U	1200	U	1200	U

Sample Number:	ECDE4		ECDE4DL		ECDF1		ECDF2		ECDF3	
Sampling Location:	X203		X203		X207		X208		X209	
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units:	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
Date Sampled:	04/12/99		04/12/99		04/12/99		04/12/99		04/12/99	
Time Sampled:	16:00		16:00		11:50		10:45		09:45	
%Moisture:										
PH.	7.3		7.3		7.4		6.9		7.2	
Dilution Factor:	1.0		2.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	230	J	190	J	460	U	460	U	460	U
2,4-Dinitrophenol	2100	U	4200	U	1200	U	1200	U	1200	U
4-Nitrophenol	2100	U	4200	U	1200	U	1200	U	1200	U
Dibenzofuran	210	J	160	J	460	U	460	U	460	U
2,4-Dinitrotoluene	820	U	1600	U	460	U	460	U	460	U
Diethylphthalate	820	U	1600	U	460	U	460	U	460	U
4-Chlorophenyl-phenylether	820	U	1600	U	460	U	460	U	460	U
Fluorene	420	J	320	J	460	U	460	U	460	U
4-Nitroaniline	2100	U	4200	U	1200	U	1200	U	1200	U
4,6-Dinitro-2-methylphenol	2100	U	4200	U	1200	U	1200	U	1200	U
N-Nitrosodiphenylamine	820	U	1600	U	460	U	460	U	460	U
4-Bromophenyl-phenylether	820	U	1600	U	460	U	460	U	460	U
Hexachlorobenzene	820	U	1600	U	460	U	460	U	460	U
Pentachlorophenol	2100	U	4200	U	1200	U	1200	U	1200	U
Phenanthrene	3800		3100		72	J	50	J	33	J
Anthracene	660	J	610	J	460	U	460	U	460	U
Carbazole	400	J	280	J	460	U	460	U	460	U
Di-n-butylphthalate	820	U	1600	U	460	U	49	J	460	U
Fluoranthene	8400		7200		140	J	110	J	140	J
Pyrene	9400		7700		110	J	100	J	130	J
Butylbenzylphthalate	410	J	380	J	460	U	460	U	460	U
3,3'-Dichlorobenzidine	820	U	1600	U	460	U	460	U	460	U
Benzo(a)anthracene	3500		2900		41	J	42	J	46	J
Chrysene	6000		4900		69	J	79	J	70	J
bis(2-Ethylhexyl)phthalate	7000		6000		460	U	460	U	460	U
Di-n-octylphthalate	820	U	1600	U	460	U	460	U	460	U
Benzo(b)fluoranthene	4900		4700		55	J	73	J	82	J
Benzo(k)fluoranthene	5200		4400		63	J	81	J	81	J
Benzo(a)pyrene	4500		3800		460	U	460	U	57	J
Indeno(1,2,3-cd)pyrene	3700		2500		36	J	53	J	46	J
Dibenz(a,h)anthracene	1500		990	J	460	U	460	U	460	U
Benzo(g,h,i)perylene	3800		2400		35	J	48	J	46	J

Analytical Results (Qualified Data) Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH
Lab. : ATAS
Reviewer:
Date:

Sample Number	ECDG6		ECDG6DL		ECDG7		ECDG7DL		ECDG8	
Sampling Location:	X204		X204		X205		X205		X206	
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units:	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
Date Sampled	04/12/99		04/12/99		04/12/99		04/12/99		04/12/99	
Time Sampled:	14.30		14:30		13:13		13:13		13:13	
%Moisture:	59		59		49		49		52	
PH:	7.2		7.2		7.1		7.1		7.1	
Dilution Factor.	1.0		5.0		1.0		2.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Phenol	800	UJ	4000	U	650	UJ	1300	U	690	UJ
bis(2-Chloroethyl)ether	800	UJ	4000	U	650	UJ	1300	U	690	UJ
2-Chlorophenol	800	UJ	4000	U	650	UJ	1300	U	690	UJ
1,3-Dichlorobenzene	800	UJ	4000	U	650	UJ	1300	U	690	UJ
1,4-Dichlorobenzene	100	J	4000	U	650	UJ	1300	U	690	UJ
1,2-Dichlorobenzene	520	J	440	J	650	UJ	1300	U	690	UJ
2-Methylphenol	800	UJ	4000	U	650	UJ	1300	U	690	UJ
2,2'-oxybis(1-chloropropane	800	UJ	4000	U	650	UJ	1300	U	690	UJ
4-Methylphenol	220	J	4000	U	170	J	110	J	190	J
N-Nitroso-di-n-propylamine	800	UJ	4000	U	650	UJ	1300	U	690	UJ
Hexachloroethane	800	UJ	4000	U	650	UJ	1300	U	690	UJ
Nitrobenzene	800	UJ	4000	U	650	UJ	1300	U	690	UJ
Isophorone	800	UJ	4000	U	650	UJ	1300	U	690	UJ
2-Nitrophenol	800	UJ	4000	U	650	UJ	1300	U	690	UJ
2,4-Dimethylphenol	800	UJ	4000	U	650	UJ	1300	U	690	UJ
bis(2-Chloroethoxy)methane	800	UJ	4000	U	650	UJ	1300	U	690	UJ
2,4-Dichlorophenol	800	UJ	4000	U	650	UJ	1300	U	690	UJ
1,2,4-Trichlorobenzene	800	UJ	4000	U	650	UJ	1300	U	690	UJ
Naphthalene	11000	J	12000		2600	J	2200		2300	J
4-Chloroaniline	800	UJ	4000	U	650	UJ	1300	U	690	UJ
Hexachlorobutadiene	800	UJ	4000	U	650	UJ	1300	U	690	UJ
4-Chloro-3-methylphenol	800	UJ	4000	U	650	UJ	1300	U	690	UJ
2-Methylnaphthalene	1800	J	1700	J	840	J	730	J	740	J
Hexachlorocyclopentadiene	800	U	4000	U	650	U	1300	U	690	UJ
2,4,6-Trichlorophenol	800	U	4000	U	650	U	1300	U	690	UJ
2,4,5-Trichlorophenol	2000	U	10000	U	1600	U	3200	U	1700	UJ
2-Chloronaphthalene	800	U	4000	U	650	U	1300	U	690	UJ
2-Nitroaniline	2000	U	10000	U	1600	U	3200	U	1700	UJ
Dimethylphthalate	800	U	4000	U	650	U	1300	U	690	UJ
Acenaphthylene	1100		1100	J	590	J	440	J	560	J
2,6-Dinitrotoluene	800	U	4000	U	650	U	1300	U	690	UJ
3-Nitroaniline	2000	U	10000	U	1600	U	3200	U	1700	UJ

Sample Number:	ECDG6		ECDG6DL		ECDG7		ECDG7DL		ECDG8	
Sampling Location:	X204		X204		X205		X205		X206	
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units:	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
Date Sampled:	04/12/99		04/12/99		04/12/99		04/12/99		04/12/99	
Time Sampled:	14:30		14:30		13:13		13:13		13:13	
%Moisture:										
PH:	7.2		7.2		7.1		7.1		7.1	
Dilution Factor:	1.0		5.0		1.0		2.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	620	J	600	J	160	J	120	J	150	J
2,4-Dinitrophenol	2000	U	10000	U	1600	U	3200	U	1700	UJ
4-Nitrophenol	2000	U	10000	U	1600	U	3200	U	1700	UJ
Dibenzofuran	1900		1900	J	820		650	J	740	J
2,4-Dinitrotoluene	800	U	4000	U	650	U	1300	U	690	UJ
Diethylphthalate	800	U	4000	U	650	U	1300	U	690	UJ
4-Chlorophenyl-phenylether	800	U	4000	U	650	U	1300	U	690	UJ
Fluorene	1600		1800	J	600	J	520	J	560	J
4-Nitroaniline	2000	U	10000	U	1600	U	3200	U	1700	UJ
4,6-Dinitro-2-methylphenol	2000	U	10000	U	1600	U	3200	U	1700	U
N-Nitrosodiphenylamine	800	U	4000	U	650	U	1300	U	690	U
4-Bromophenyl-phenylether	800	U	4000	U	650	U	1300	U	690	U
Hexachlorobenzene	800	U	4000	U	650	U	1300	U	690	U
Pentachlorophenol	2000	U	10000	U	1600	U	3200	U	1700	U
Phenanthrene	8200		8100		4200		3600		3900	
Anthracene	3800		3700	J	1800		1400		1700	
Carbazole	1000		970	J	520	J	420	J	500	J
Di-n-butylphthalate	91	J	4000	U	650	U	1300	U	690	U
Fluoranthene	12000		14000		5400		4100		5000	
Pyrene	14000		12000		5900		4800		5600	
Butylbenzylphthalate	420	J	450	J	250	J	200	J	290	J
3,3'-Dichlorobenzidine	800	U	4000	U	650	U	1300	U	690	U
Benzo(a)anthracene	6900		6500		3700		3000		3600	
Chrysene	8600		8500		4200		3400		4100	
bis(2-Ethylhexyl)phthalate	4600		4300	U	1200	U	1300	U	1300	U
Di-n-octylphthalate	800	U	4000	U	650	U	1300	U	690	U
Benzo(b)fluoranthene	8500		8600		4000		4100		3300	
Benzo(k)fluoranthene	7600		8600		4100		3200		4100	
Benzo(a)pyrene	8700		8800		4600		3600		4100	
Indeno(1,2,3-cd)pyrene	7000		5400		3700		2800		3400	
Dibenz(a,h)anthracene	2800		2100	J	1600		1200	J	1400	
Benzo(g,h,i)perylene	6600		5000		3300		2700		3100	

Analytical Results (Qualified Data) Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH
Lab. ATAS
Reviewer:
Date:

Sample Number:	ECDG8DL		SBLKFZ							
Sampling Location:	X206									
Matrix:	Soil		Soil							
Units:	ug/kg		ug/kg							
Date Sampled:	04/12/99									
Time Sampled:	13:13									
%Moisture:	52									
PH:	7.1		7							
Dilution Factor:	2.0		1.0							
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Phenol	1400	U	330	U						
bis(2-Chloroethyl)ether	1400	U	330	U						
2-Chlorophenol	1400	U	330	U						
1,3-Dichlorobenzene	1400	U	330	U						
1,4-Dichlorobenzene	1400	U	330	U						
1,2-Dichlorobenzene	1400	U	330	U						
2-Methylphenol	1400	U	330	U						
2,2'-oxybis(1-chloropropane	1400	U	330	U						
4-Methylphenol	120	J	330	U						
N-Nitroso-di-n-propylamine	1400	U	330	U						
Hexachloroethane	1400	U	330	U						
Nitrobenzene	1400	U	330	U						
Isophorone	1400	U	330	U						
2-Nitrophenol	1400	U	330	U						
2,4-Dimethylphenol	1400	U	330	U						
bis(2-Chloroethoxy)methane	1400	U	330	U						
2,4-Dichlorophenol	1400	U	330	U						
1,2,4-Trichlorobenzene	1400	U	330	U						
Naphthalene	2200		330	U						
4-Chloroaniline	1400	U	330	U						
Hexachlorobutadiene	1400	U	330	U						
4-Chloro-3-methylphenol	1400	U	330	U						
2-Methylnaphthalene	690	J	330	U						
Hexachlorocyclopentadiene	1400	U	330	U						
2,4,6-Trichlorophenol	1400	U	330	U						
2,4,5-Trichlorophenol	3400	U	830	U						
2-Chloronaphthalene	1400	U	330	U						
2-Nitroaniline	3400	U	830	U						
Dimethylphthalate	1400	U	330	U						
Acenaphthylene	480	J	330	U						
2,6-Dinitrotoluene	1400	U	330	U						
3-Nitroaniline	3400	U	830	U						

Sample Number:	ECDG8DL		SBLKFZ							
Sampling Location:	X206									
Matrix:	Soil		Soil							
Units:	ug/kg		ug/kg							
Date Sampled:	04/12/99									
Time Sampled:	13:13									
%Moisture:										
PH:	7.1		7							
Dilution Factor:	2.0		1.0							
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	120	J	330	U						
2,4-Dinitrophenol	3400	U	830	U						
4-Nitrophenol	3400	U	830	U						
Dibenzofuran	670	J	330	U						
2,4-Dinitrotoluene	1400	U	330	U						
Diethylphthalate	1400	U	330	U						
4-Chlorophenyl-phenylether	1400	U	330	U						
Fluorene	550	J	330	U						
4-Nitroaniline	3400	U	830	U						
4,6-Dinitro-2-methylphenol	3400	U	830	U						
N-Nitrosodiphenylamine	1400	U	330	U						
4-Bromophenyl-phenylether	1400	U	330	U						
Hexachlorobenzene	1400	U	330	U						
Pentachlorophenol	3400	U	830	U						
Phenanthrene	3700		330	U						
Anthracene	1600		330	U						
Carbazole	430	J	330	U						
Di-n-butylphthalate	1400	U	330	U						
Fluoranthene	5200		330	U						
Pyrene	4900		330	U						
Butylbenzylphthalate	320	J	330	U						
3,3'-Dichlorobenzidine	1400	U	330	U						
Benzo(a)anthracene	3300		330	U						
Chrysene	3600		330	U						
bis(2-Ethylhexyl)phthalate	1400	U	95	J						
Di-n-octylphthalate	1400	U	56	J						
Benzo(b)fluoranthene	3700		330	U						
Benzo(k)fluoranthene	4300		330	U						
Benzo(a)pyrene	4000		330	U						
Indeno(1,2,3-cd)pyrene	2800		330	U						
Dibenz(a,h)anthracene	1200	J	330	U						
Benzo(g,h,i)perylene	2600		330	U						

Analytical Results (Qualified Dat Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH Number of Soil Sample 9
Lab. : ATAS Number of Water Sampl 7
Reviewer:
Date:

Sample Number:	EBSL6		ECCY8		ECCY9		ECCZ0		ECDD9	
Sampling Location:	FIELD BLANK		S104		S105		S106		S101	
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled:	04/13/99		04/12/99		04/12/99		04/12/99		04/13/99	
Time Sampled:			11:50		11:50		09:45		10:00	
%Moisture:										
PH:	7.5		7.1		7.2		7.1		7.4	
Dilution Factor:	1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
beta-BHC	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
delta-BHC	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
gamma-BHC (Lindane)	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Heptachlor	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Aldrin	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Heptachlor Epoxide	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Endosulfan I	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Dieldrin	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDE	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Endrin	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Endosulfan II	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDD	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Endosulfan Sulfate	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDT	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Methoxychlor	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Endrin Ketone	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Endrin Aldehyde	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
alpha-Chlordane	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
gamma-Chlordane	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Toxaphene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Aroclor-1016	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor-1221	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Aroclor-1232	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor-1242	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor-1248	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor-1254	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor-1260	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U

Analytical Results (Qualified Dat Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH
Lab. : ATAS
Reviewer:
Date:

Sample Number:	ECDE0		ECDE1		ECDE1MS		ECDE1MSD		PBLK5IU	
Sampling Location:	S102		S103		S103		S103			
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled:	04/13/99		04/12/99		04/12/99		04/12/99			
Time Sampled:	09:00		14:30		14:30		14:30			
%Moisture:										
PH:	9.8		7.3		7.3		7.3		7	
Dilution Factor:	1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	0.050	U	0.050	UJ	0.050	U	0.050	U	0.050	U
beta-BHC	0.050	U	0.050	UJ	0.050	U	0.050	U	0.050	U
delta-BHC	0.050	U	0.050	UJ	0.050	U	0.050	U	0.050	U
gamma-BHC (Lindane)	0.050	U	0.050	UJ	0.42		0.45		0.050	U
Heptachlor	0.050	U	0.050	UJ	0.35		0.36		0.050	U
Aldrin	0.050	U	0.050	UJ	0.34		0.34		0.050	U
Heptachlor Epoxide	0.050	U	0.050	UJ	0.050	U	0.050	U	0.050	U
Endosulfan I	0.050	U	0.006	J	0.006	J	0.050	U	0.050	U
Dieldrin	0.10	U	0.10	UJ	0.84		0.82		0.10	U
4,4'-DDE	0.10	U	0.10	UJ	0.10	U	0.10	U	0.10	U
Endrin	0.10	U	0.10	UJ	0.89		0.88		0.10	U
Endosulfan II	0.10	U	0.10	UJ	0.10	U	0.10	U	0.10	U
4,4'-DDD	0.10	U	0.10	UJ	0.025	J	0.025	J	0.10	U
Endosulfan Sulfate	0.10	U	0.10	UJ	0.10	U	0.10	U	0.10	U
4,4'-DDT	0.10	U	0.10	UJ	0.61		0.54		0.10	U
Methoxychlor	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
Endrin Ketone	0.10	U	0.10	UJ	0.10	U	0.10	U	0.10	U
Endrin Aldehyde	0.10	U	0.10	UJ	0.10	U	0.10	U	0.10	U
alpha-Chlordane	0.050	U	0.050	UJ	0.050	U	0.050	U	0.050	U
gamma-Chlordane	0.050	U	0.050	UJ	0.050	U	0.050	U	0.050	U
Toxaphene	5.0	U	5.0	UJ	5.0	U	5.0	U	5.0	U
Aroclor-1016	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U
Aroclor-1221	2.0	U	2.0	UJ	2.0	U	2.0	U	2.0	U
Aroclor-1232	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U
Aroclor-1242	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U
Aroclor-1248	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U
Aroclor-1254	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U
Aroclor-1260	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U

Analytical Results (Qualified Data) Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH
Lab. : ATAS
Reviewer:
Date:

Sample Number:	ECDE2		ECDE2MS		ECDE2MSD		ECDE3		ECDE4	
Sampling Location:	X201		X201		X201		X202		X203	
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units:	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
Date Sampled:	04/13/99		04/13/99		04/13/99		04/13/99		04/12/99	
Time Sampled:	10:00		10:00		10:00		09:00		16:00	
%Moisture:	33		33		33		51		60	
PH:	6.5		6.5		6.5		7.5		7.3	
Dilution Factor:	5.0		5.0		5.0		5.0		5.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	13	UJ	13	U	13	U	17	U	21	U
beta-BHC	13	UJ	13	U	13	U	17	U	21	U
delta-BHC	13	UJ	13	U	13	U	17	U	21	U
gamma-BHC (Lindane)	13	UJ	14	J	19	J	17	U	21	U
Heptachlor	13	UJ	15	J	19	J	2.9	J	21	U
Aldrin	13	UJ	11	J	15	J	17	U	1.4	J
Heptachlor Epoxide	13	UJ	1.8	J	4.2	J	11	J	5 4	J
Endosulfan I	13	UJ	13	U	13	U	17	U	21	U
Dieldrin	25	UJ	27	J	35	J	21	J	41	U
4,4'-DDE	6.4	J	11	J	14	J	19	J	38	J
Endrin	25	UJ	28	J	34	J	34	U	41	U
Endosulfan II	25	UJ	25	U	25	U	34	U	41	U
4,4'-DDD	11	J	20	J	29	J	30	J	39	J
Endosulfan Sulfate	25	UJ	25	U	25	U	34	U	41	U
4,4'-DDT	6.8	J	38	J	47	J	16	J	16	J
Methoxychlor	130	UJ	130	U	130	U	46	J	210	U
Endrin Ketone	25	UJ	25	U	25	U	34	U	41	U
Endrin Aldehyde	25	UJ	25	U	25	U	34	U	41	U
alpha-Chlordane	11	J	23	J	26	J	52	J	84	J
gamma-Chlordane	13	J	22	J	29	J	58	J	110	J
Toxaphene	1300	UJ	1300	U	1300	U	1700	U	2100	U
Aroclor-1016	250	UJ	250	U	250	U	340	U	410	U
Aroclor-1221	500	UJ	500	U	500	U	680	U	840	U
Aroclor-1232	250	UJ	250	U	250	U	340	U	410	U
Aroclor-1242	250	UJ	250	U	250	U	340	U	410	U
Aroclor-1248	250	UJ	250	U	250	U	340	U	410	U
Aroclor-1254	250	UJ	250	U	250	U	340	U	410	U
Aroclor-1260	250	UJ	250	U	250	U	340	U	410	U

Analytical Results (Qualified Dat Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH
Lab. : ATAS
Reviewer:
Date:

Sample Number:	ECDF1		ECDF2		ECDF3		ECDG6		ECDG7	
Sampling Location:	X207		X208		X209		X204		X205	
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units:	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
Date Sampled:	04/12/99		04/12/99		04/12/99		04/12/99		04/12/99	
Time Sampled:	11:50		10:45		09:45		14:30		13:13	
%Moisture:	28		28		29		59		49	
PH:	7.4		6.9		7.2		7.2		7.1	
Dilution Factor:	1.0		1.0		1.0		5.0		5.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	2.4	U	2.4	U	2.4	U	21	U	4.7	J
beta-BHC	2.4	U	2.4	U	2.4	U	21	U	17	U
delta-BHC	2.4	U	2.4	U	2.4	U	21	U	17	U
gamma-BHC (Lindane)	2.4	U	2.4	U	2.4	U	21	U	17	U
Heptachlor	2.4	U	2.4	U	2.4	U	21	U	17	U
Aldrin	2.4	U	2.4	U	2.4	U	21	U	17	U
Heptachlor Epoxide	2.4	U	2.4	U	0.33	J	21	U	17	U
Endosulfan I	2.4	U	2.4	U	2.4	U	3.6	J	17	U
Dieldrin	0.71	J	4.6	U	0.75	J	40	U	12	J
4,4'-DDE	4.6	U	4.6	U	1.2	J	26	J	11	J
Endrin	4.6	U	4.6	U	4.6	U	40	U	32	U
Endosulfan II	4.6	U	4.6	U	4.6	U	40	U	32	U
4,4'-DDD	0.79	J	1.2	J	1.1	J	69	J	43	J
Endosulfan Sulfate	4.6	U	4.6	U	4.6	U	16	J	32	U
4,4'-DDT	4.6	U	0.43	J	1.6	J	40	U	14	J
Methoxychlor	24	U	1.6	J	24	U	210	U	170	U
Endrin Ketone	4.6	U	4.6	U	4.6	U	40	U	32	U
Endrin Aldehyde	4.6	U	4.6	U	4.6	U	40	U	11	J
alpha-Chlordane	0.75	J	1.9	J	2.4	U	66	J	72	J
gamma-Chlordane	0.85	J	2.6		0.39	J	85	J	88	J
Toxaphene	240	U	240	U	240	U	2100	U	1700	U
Aroclor-1016	46	U	46	U	46	U	400	U	320	U
Aroclor-1221	93	U	93	U	94	U	820	U	660	U
Aroclor-1232	46	U	46	U	46	U	400	U	320	U
Aroclor-1242	46	U	46	U	46	U	400	U	320	U
Aroclor-1248	46	U	46	U	46	U	400	U	320	U
Aroclor-1254	46	U	46	U	46	U	400	U	320	U
Aroclor-1260	46	U	46	U	46	U	400	U	320	U

Analytical Results (Qualified Dat Page __ of __

Case #: 26926 SDG: ECCY8
Site: GRANITE CITY DITCH
Lab. : ATAS
Reviewer:
Date:

Sample Number:	ECDG8		PBLK5IV							
Sampling Location:	X206									
Matrix:	Soil		Soil							
Units:	ug/kg		ug/kg							
Date Sampled:	04/12/99									
Time Sampled:	13:13									
%Moisture:	52									
PH:	7.1		7							
Dilution Factor:	10.0		1.0							
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	35	U	1.7	U						
beta-BHC	35	U	1.7	U						
delta-BHC	35	U	1.7	U						
gamma-BHC (Lindane)	35	U	1.7	U						
Heptachlor	35	U	1.7	U						
Aldrin	35	U	1.7	U						
Heptachlor Epoxide	6.3	J	1.7	U						
Endosulfan I	35	U	1.7	U						
Dieldrin	16	J	3.3	U						
4,4'-DDE	16	J	3.3	U						
Endrin	69	U	3.3	U						
Endosulfan II	69	U	3.3	U						
4,4'-DDD	71	J	3.3	U						
Endosulfan Sulfate	14	J	3.3	U						
4,4'-DDT	69	U	3.3	U						
Methoxychlor	350	U	17	U						
Endrin Ketone	69	U	3.3	U						
Endrin Aldehyde	69	U	3.3	U						
alpha-Chlordane	110	J	1.7	U						
gamma-Chlordane	120	J	1.7	U						
Toxaphene	3500	U	170	U						
Aroclor-1016	690	U	33	U						
Aroclor-1221	1400	U	67	U						
Aroclor-1232	690	U	33	U						
Aroclor-1242	690	U	33	U						
Aroclor-1248	690	U	33	U						
Aroclor-1254	690	U	33	U						
Aroclor-1260	690	U	33	U						

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: IL

Case No: 26926 Site Name Location: Granite City Ditch

Contractor or EPA Lab: ATAS Data User: IEPA

No. of Samples: 17 Date Sampled or Data Received: 5-20-99

Have Chain-of-Custody records been received? Yes ✓ No ___
Have traffic reports or packing lists been received? Yes ✓ No ___
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No ___
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____

_____ _____ _____ _____

Are basic data forms in? Yes ✓ No ___
No of samples claimed: 17 No. of samples received: 17

Received by: Lynette Burnett Date: 5-20-99

Received by LSSS: Lynette Burnett Date: 5-20-99

Review started: 5-21-99 Reviewer Signature: [illegible]

Total time spent on review: 18 Date review completed: 5-25-99

Copied by: Lynette Burnett Date: 6-4-99

Mailed to user by: Lynette Burnett Date: 6-4-99

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffen, Data mgmt. Coordinator, Region V, 5SCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

_____

_____

Received by Data Mgmt. Coordinator for Files. Data: _____

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: June 7, 1999

SUBJECT: Review of Data
Received for Review on May 19, 1999

FROM: Stephen L. Ostrodka, Chief (SRT-4J) /LF
Superfund Technical Support Section

TO: Data User: IEPA

We have reviewed the data by CADRE for the following case:

SITE NAME: Granite City Ditch

CASE NUMBER: 26926 SDG NUMBER: MEBEO5

Number and Type of Samples: 7 water, 9 soil

Sample Numbers: MEBEO5, MEBFC9, MEBFD0-9, MEBFE0-3

Laboratory: SWQK Hrs. for Review: _____

Following are our findings:

Non-detected CN results are unusable (R) due to extremely low matrix spike recovery(<30%).

All other data are usable with the qualifications described in the attached narrative.

L.Finkelberg
06-08-99

RECEIVED
JUN 21 1999
IEPA-BOL-FSRS

CC: Cecilia Luckett
Region 5 TPO
Mail Code: SM-5J

Case Number : 26926
Site Name: Granite City Ditch

SDG Number: MEBEQ5
Laboratory: SWOK

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Seven water samples numbered MEBEQ5, MEBFC9, and MEBFD0-4, and nine water samples numbered MEBFD5-9 and MEBFE0-3 were collected on April 12 and 13, 1999. The lab received the samples on April 14, 1999 in good condition. All samples were analyzed for metals and cyanide. All samples were analyzed using the CLP SOW ILM04.0 analysis procedure.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using the MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectrometric procedure.

Reviewed By: J. Ganz
Date: June 7, 1999

Case Number : 26926
Site Name: Granite City Ditch

SDG Number: MEBEQ5
Laboratory: SWOK

1. HOLDING TIME:

HOLDING TIME CRITERIA

Inorganic

	-- Holding Time --		------- pH -------	
	Primary	Expanded	Primary	Expanded
Metals	180	0	2.0	0.0
Mercury	28	0	2.0	0.0
Cyanide	14	0	12.0	0.0

DC-280: The following inorganic soil samples were reviewed for holding time violations using criteria developed for water samples.

MEBFD5, MEBFD6, MEBFD7, MEBFD8
MEBFD9, MEBFE0, MEBFE1, MEBFE2, MEBFE3

No problems were found for this qualification.

2. CALIBRATIONS:

CALIBRATION CRITERIA

Inorganic

Percent Recovery Limits

	--- Primary ---		-- Expanded ---	
	Low	High	Low	High
Cyanide	85.00	115.00	70.00	130.00
ICP	90.00	110.00	75.00	125.00
Mercury	80.00	120.00	65.00	135.00

No problems were found for this qualification.

3. BLANKS:

LABORATORY BLANKS CRITERIA

DC-284: The following inorganic samples are associated with a calibration,

Reviewed By: J. Ganz
Date: June 7, 1999

preparation, or field blank concentration which is greater than the instrument detection limit (IDL). The sample concentration is also greater than the IDL and less than five times the blank concentration.
Hits are qualified "J"; non-detects are acceptable.

Selenium
MEBFD5, MEBFD6, MEBFD7
MEBFD9, MEBFE0, MEBFE1

Sodium
MEBEQ5

Thallium
MEBFD5, MEBFD7, MEBFD8, MEBFD9, MEBFE0
MEBFE1, MEBFE2, MEBFE3

Zinc
MEBFC9, MEBFD2

Cyanide
MEBEQ5, MEBFC9, MEBFD0, MEBFD1, MEBFD2
MEBFD3, MEBFD4, MEBFD6, MEBFD8
MEBFE1, MEBFE2

DC-338: During review of the following inorganic samples, the reported IDL/default CRDL value was used for cyanide.

MEBEQ5, MEBFC9, MEBFD0, MEBFD1
MEBFD2, MEBFD3, MEBFD4, MEBFD5
MEBFD6, MEBFD7, MEBFD8, MEBFD9, MEBFE0
MEBFE1, MEBFE2, MEBFE3

4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:

MATRIX SPIKE CRITERIA

Inorganic

Percent Recovery Limits

Upper	125.0
Lower	75.0
Extreme lower	30.0

`C-267: The following inorganic samples are associated with a matrix spike recovery which is high (>125%)
Hits are biased high and are qualified "J".

Reviewed By: J. Ganz
Date: June 7, 1999

Non-detects are acceptable.

Arsenic
MEBFD5, MEBFD6, MEBFD7, MEBFD8
MEBFD9, MEBFE0, MEBFE1, MEBFE2, MEBFE3

Chromium
MEBFD5, MEBFD6, MEBFD7, MEBFD8
MEBFD9, MEBFE0, MEBFE1, MEBFE2, MEBFE3

Manganese
MEBFD5, MEBFD6, MEBFD7, MEBFD8
MEBFD9, MEBFE0, MEBFE1, MEBFE2, MEBFE3

DC-269: The following inorganic samples are associated with a matrix spike recovery which is extremely low (<30 %) indicating that sample results may be biased low.
Hits are qualified "J" and non-detects are qualified "R".

Cyanide
MEBFD5, MEBFD6, MEBFD7, MEBFD8
MEBFD9, MEBFE0, MEBFE1, MEBFE2, MEBFE3

DC-331: The following inorganic soil samples are associated with a solid laboratory control sample (LCS) higher than the EPA control limit indicating a potential positive bias in the sample results. Hits are qualified "J", non-detects are acceptable.

Sodium
MEBFD5, MEBFD6, MEBFD7, MEBFD8, MEBFD9
MEBFE0, MEBFE1, MEBFE2, MEBFE3

5. LABORATORY AND FIELD DUPLICATE

No problems were found for this qualification.

6. ICP ANALYSIS

No problems were found for this qualification.

7. GFAA ANALYSIS

No GFAA analyses were performed for this case.

8. SAMPLE RESULTS

Reviewed By: J. Ganz
Date: June 7, 1999

All data, except those qualified above, are acceptable.

Reviewed By: J. Ganz
Date: June 7, 1999

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The data are unusable. (The compound may or may not be present)

Analytical Results (Qualified Data)

Case #: 26926 SDG: MEBEQ5
Site: GRANITE CITY DITCH
Lab. : SWOK
Reviewer: J. GANZ
Date: JUNE 7, 1999

Number of Soil Samples : 9
Number of Water Samples : 7

Sample Number:	MEBEQ5		MEBFC9		MEBFD0		MEBFD1		MEBFD2	
Sampling Location:	FIELDBLANK		S101		S102		S103		S104	
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled:	04/13/99		04/13/99		04/13/99		04/12/99		04/12/99	
Time Sampled:	10:30		10:00		09:00		14:30		11:50	
% Solids:	0.0		0.0		0.0		0.0		0.0	
Dilution Factor:	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aluminum	9.0	U	14.4		520		432		181	
Antimony	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Arsenic	2.0	U	6.1		2.4		3.1		4.8	
Barium	1.3		308		47.5		60.2		293	
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Cadmium	1.0	U	1.0	U	1.0	U	2.1		1.0	U
Calcium	19.0	U	110000		77000		74800		110000	
Chromium	1.0	U	1.0	U	4.9		3.2		1.0	U
Cobalt	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U
Copper	3.0	U	3.0	U	8.3		13.3		4.7	
Iron	35.4		530		884		2360		2570	
Lead	2.0	U	2.0	U	12.6		14.3		3.9	
Magnesium	55.0	U	25400		5660		15800		27900	
Manganese	1.0	U	954		175		1420		601	
Mercury	0.10	U	0.10	U	0.14		0.10	U	0.10	U
Nickel	1.0	U	1.5		2.6		4.0		2.3	
Potassium	57.0		4100		18300		6190		5520	
Selenium	3.0	U	3.0	U	3.9		3.0	U	3.0	U
Silver	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Sodium	154	J	21600		43300		29600		17900	
Thallium	3.0	U	3.0	U	3.0		3.0	U	3.0	U
Vanadium	1.0	U	1.0	U	25.8		8.6		1.6	
Zinc	4.0	U	4.3	J	36.2		44.6		17.5	J
Cyanide	1.7	J	2.0	J	2.1	J	5.4	J	3.8	J

Analytical Results (Qualified Data)

Case #: 26926 SDG: MEBEQ5
Site: GRANITE CITY DITCH
Lab. : SWOK
Reviewer: J. GANZ
Date: JUNE 7, 1999

Sample Number:	MEBFD3		MEBFD4							
Sampling Location:	S105		S106							
Matrix:	Water		Water							
Units:	ug/L		ug/L							
Date Sampled:	04/12/99		04/12/99							
Time Sampled:	11:50		09:45							
% Solids:	0.0		0.0							
Dilution Factor:	1.0		1.0							
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aluminum	2060		709							
Antimony	5.0	U	5.0	U						
Arsenic	6.3		3.5							
Barium	296		213							
Beryllium	1.0	U	1.0	U						
Cadmium	1.0	U	1.0	U						
Calcium	101000		88600							
Chromium	2.4		1.4							
Cobalt	3.0	U	3.0	U						
Copper	6.5		6.4							
Iron	3910		1690							
Lead	6.4		9.8							
Magnesium	31000		22500							
Manganese	699		758							
Mercury	0.10	U	0.10	U						
Nickel	10.6		3.0							
Potassium	9240		5850							
Selenium	3.0	U	3.0	U						
Silver	2.0	U	2.0	U						
Sodium	1140000		20700							
Thallium	3.0	U	3.8							
Vanadium	2.3		5.3							
Zinc	43.9		45.6							
Cyanide	2.9	J	2.2	J						

Analytical Results (Qualified Data)

Case #: 26926 SDG: MEBEQ5
Site: GRANITE CITY DITCH
Lab. : SWOK
Reviewer: J. GANZ
Date: JUNE 7, 1999

Sample Number:	MEBFD5		MEBFD6		MEBFD7		MEBFD8		MEBFD9	
Sampling Location:	X201		X202		X203		X204		X205	
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units:	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Date Sampled:	04/13/99		04/13/99		04/13/99		04/12/99		04/12/99	
Time Sampled:	10:00		09:00		16:00		14:30		13:13	
% Solids:	63.0		41.7		43.0		40.2		52.6	
Dilution Factor:	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aluminum	5270		11600		13200		14300		8300	
Antimony	1.6	U	2.4	U	3.2		3.3		1.9	U
Arsenic	6.6	J	8.0	J	13.4	J	13.6	J	10.9	J
Barium	254		220		264		271		158	
Beryllium	0.47		1.9		1.3		1.7		1.0	
Cadmium	0.77		2.5		4.8		5.1		2.6	
Calcium	25900		85800		64000		42300		8400	
Chromium	22.2	J	182	J	129	J	193	J	133	J
Cobalt	4.4		4.7		8.1		8.9		7.5	
Copper	18.8		68.0		108		129		68.9	
Iron	12500		30200		36500		39000		24400	
Lead	93.4		297		830		517		414	
Magnesium	4740		13500		10100		9620		3660	
Manganese	237	J	2420	J	1350	J	1460	J	522	J
Mercury	0.07	U	0.10	U	0.15		0.13		0.14	
Nickel	13.9		21.1		36.1		37.9		26.6	
Potassium	885		1620		2360		2130		1440	
Selenium	1.3	J	1.8	J	1.9	J	3.6		2.7	J
Silver	0.63	U	0.94	U	0.89	U	0.95	U	0.75	U
Sodium	512	J	1330	J	1070	J	1220	J	767	J
Thallium	1.5	J	1.4	U	1.5	J	1.8	J	1.9	J
Vanadium	21.0		105		111		112		80.8	
Zinc	159		622		926		1210		655	
Cyanide	0.08	R	0.17	J	0.11	R	0.28	J	0.66	J

Analytical Results (Qualified Data)

Case #: 26926 SDG: MEBEQ5
Site: GRANITE CITY DITCH
Lab. : SWOK
Reviewer: J. GANZ
Date: JUNE 7, 1999

Sample Number:	MEBFE0		MEBFE1		MEBFE2		MEBFE3			
Sampling Location:	X206		X207		X208		X209			
Matrix:	Soil		Soil		Soil		Soil			
Units:	mg/kg		mg/kg		mg/kg		mg/kg			
Date Sampled:	04/12/99		04/12/99		04/12/99		04/12/99			
Time Sampled:	13:13		11:50		10:45		09:45			
% Solids:	48.2		67.6		74.4		72.6			
Dilution Factor:	1.0		1.0		1.0		1.0			
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aluminum	8020		13900		5530		4220			
Antimony	2.1	U	1.5	U	1.3	U	1.4	U		
Arsenic	12.2	J	8.0	J	4.8	J	8.8	J		
Barium	160		248		144		117			
Beryllium	0.95		0.96		0.37		0.29			
Cadmium	2.7		0.30	U	0.27	U	0.57			
Calcium	10600		21300		16200		9980			
Chromium	83.3	J	19.6	J	12.3	J	49.3	J		
Cobalt	7.6		8.2		6.4		5.0			
Copper	65.7		27.3		9.7		10.4			
Iron	24600		18900		11800		12100			
Lead	430		16.7		19.9		47.5			
Magnesium	3940		8790		4850		3690			
Manganese	536	J	649	J	328	J	533	J		
Mercury	0.10	U	0.07	U	0.06	U	0.06	U		
Nickel	28.5		23.9		15.9		14.5			
Potassium	1400		2900		880		711			
Selenium	1.7	J	1.2	J	0.80	U	0.83	U		
Silver	0.83	U	0.59	U	0.53	U	0.55	U		
Sodium	811	J	776	J	429	J	491	J		
Thallium	1.3	J	1.2	J	1.1	J	1.0	J		
Vanadium	78.6		28.5		19.5		31.4			
Zinc	708		85.5		53.8		357			
Cyanide	0.51	J	0.14	J	0.07	J	0.07	R		

QC EXCEPTION SUMMARY REPORT

CASE\SAS#: 26926 SITE: Granite City Ditch MATRIX: S/W WATER SAMPLE SPK: _____

DATA SET: MEBER5 LAB: SWOK CONC: low WATER SAMPLE DUP: _____

LAB QC # _____ REVIEWED BY: J. Ganz SOIL SAMPLE SPK: _____

DATE: 5-25-99 SOIL SAMPLE DUP: _____

FORM #		FORM 2	FORM 2	FORM 3	FORM 3	FORM 3	FORM 4	FORM 5	FORM 6	FORM 7	FORM 7	FORM 9	FORM 9	FORM 6	FORM 5	FIELD	FIELD	FIELD	FIELD		
ELEMENT	HOLD TIME	INITIAL CALIB	CONTI N CALIB	CALIB BLANK	PREP WATER BLANK	PREP SOIL BLANK	ICS %R	SOIL SPIKE %R	SOIL DUP RPD	LCS AQ	LCS SOIL	SERIAL DILUTION AQUEOUS	SERIAL DILUTION SOIL	AQ DUP RPD	AQ SPIKE %R	BLANK	DUP RPD	BLANK	DUP RPD	GFAA DUP	GFAA ANALYT SPIKE
ALUMINUM																					
ANTIMONY																					
ARSENIC								150.1													
BARIUM																					
BERYLLIUM																					
CADMIUM																					
CALCIUM																					
CHROMIUM								154.1													
COBALT																					
COPPER																					
IRON																					
LEAD																					
MAGNESIUM																					
MANGANESE								240.6													
MERCURY																					
NICKEL																					
POTASSIUM																					
SELENIUM						0.64															
SILVER																					
SODIUM					52.33						290.73										
THALLIUM					3.3																
TIN																					
VANADIUM																					
ZINC					4.09																
CYANIDE					1.98	0.07		9.7													

Na: EQ5
Zn: C9,T
CN: EQ5, C4, DO-4,

Se: D5-7,9; EO,1
Tl: D5,7-9; EO-3
CN: D6.8 · E1.2

FB (MEBEQ5)/CN: all

Na: MEBER5

ESAT-5.060 0

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: 1L122

Case No: 26926 Site Name Location: Granite City Ditch

Contractor or EPA Lab: SWOK Data User: IEPA

No. of Samples: 16 Date Sampled or Data Received: 5-19-99

Have Chain-of-Custody records been received? Yes ✓ No ___
Have traffic reports or packing lists been received? Yes ✓ No ___
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No ___
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____

_____ _____ _____ _____

Are basic data forms in? Yes ✓ No ___
No of samples claimed: 16 No. of samples received: 16

Received by: Lynette Burnett Date: 5-19-99

Received by LSSS: Lynette Burnett Date: 5-19-99

Review started: 5-25-99 Reviewer Signature: J Gary

Total time spent on review: 13 Date review completed: 6-7-99

Copied by: Lynette Burnett Date: 6-16-99

Mailed to user by: Lynette Burnett Date: 6-16-99

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffen, Data mgmt. Coordinator, Region V, 5SCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

_____

_____

Received by Data Mgmt. Coordinator for Files. Data: _____