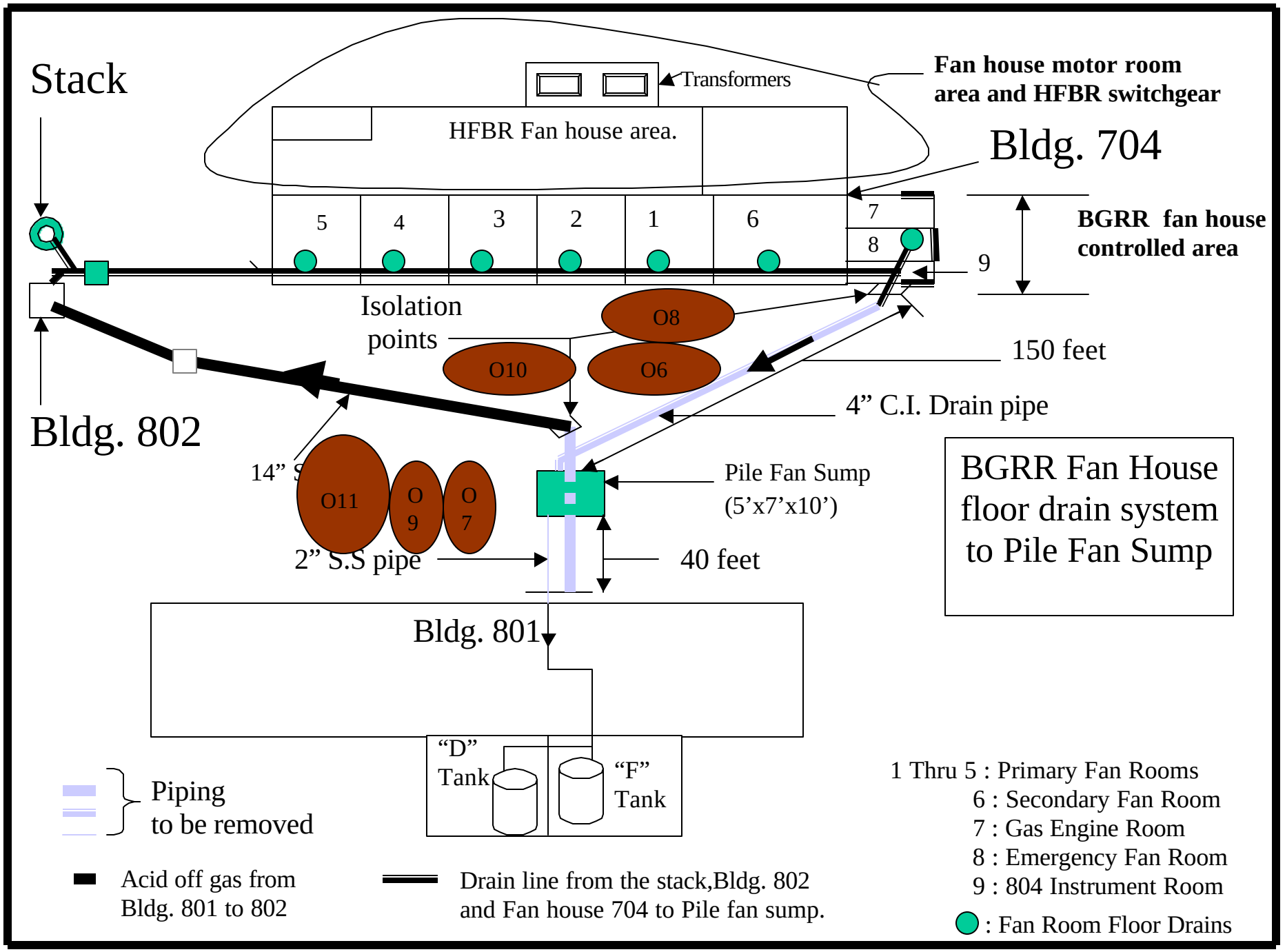
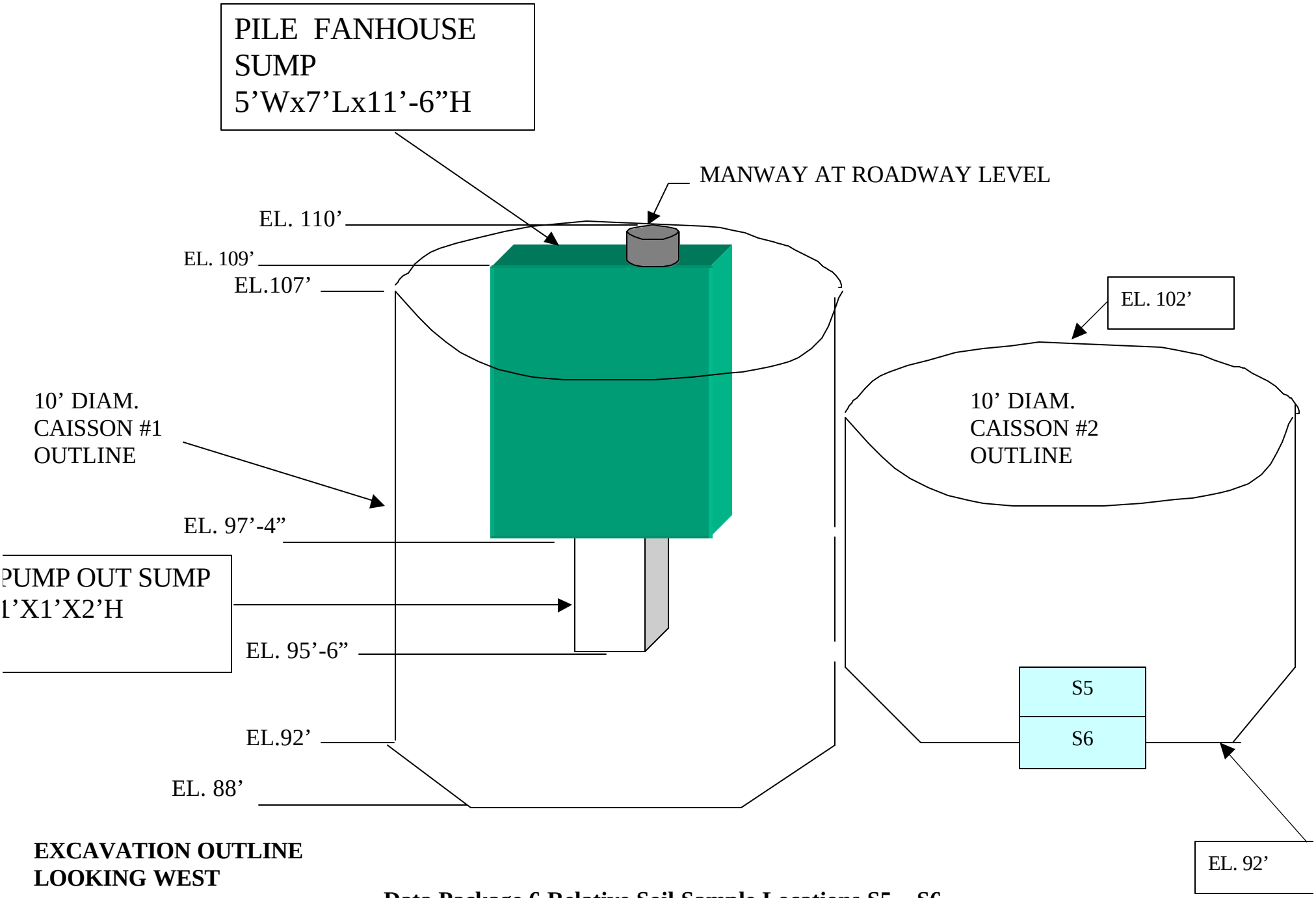
PFS Remediation – Final Verification Sampling

Data Package 6

COC #	SDG#	Sample Description	Sample Number	Location
6521	23265	Trip Blank	076-400000315-12	
6521	23265	FH Overburden pile – 1 N	065-007-000316-36	06
6521	23265	801 Overburden pile - 1	065-00800316-36	07
6521	23265	FH Overburden pile – 1 S	065-009-000316-36	08
6521	23265	801 Overburden pile - 2	065-01000316-36	09
6521	23265	FH Overburden pile – east	065-011-00316-36	010
6521	23265	801 Overburden pile - 3	065-01200316-36	011
6521	23265	Center Caisson 2	065-01400316-36	S6
6521	23265	West Pipe 1 – PFS	065-01400316-36	S7
6521	23265	West Pipe 1 – PFS	065-01700316-30	S8
6521	23265	East Pipe 3 – PFS	065-01800316-36	S9
6521	23265	East Pipe 3 – PFS	065-01800316-30	S10
6521	23265	North Pipe 4 – PFS	065-01900316-30	S11
6521	23265	North Pipe 4 – PFS	065-01900316-36	S12
6521	23265	Southside PFS – sides	065-02000316-30	S13
6521	23265	Southside PFS – sides	065-02000316-36	S14
6521	23265	East side PFS – sides	065-02100316-30	S15
6521	23265	Southside PFS – sides	065-02100316-36	S16
6521	23265	Northside PFS – sides	065-02200316-30	S17
6521	23265	Northside PFS – sides	065-02200316-36	S18
6521	23265	Westside PFS - sides	065-02300316-30	S19
6521	23265	Westside PFS - sides	065-02300316-30	S20

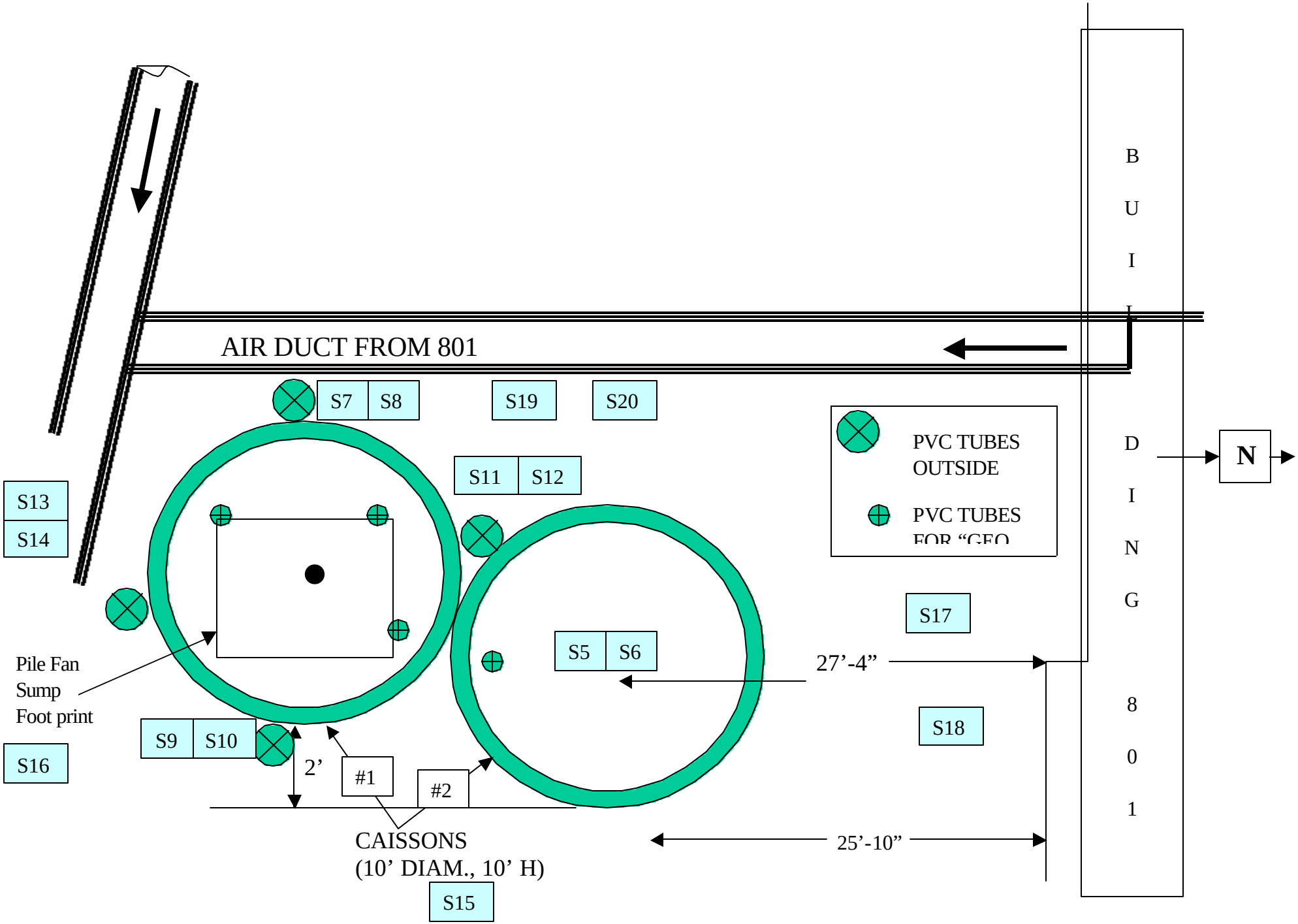


Data Package 6 Relative Over Burden Sample Locations O6 – O11



EXCAVATION OUTLINE
LOOKING WEST

Data Package 6 Relative Soil Sample Locations S5 – S6



Data Package 6 Relative Soil Sample Locations S5 – S20

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 1000037900

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B323A

Level: (low/med) LOW Date Received: 03/22/00

% Moisture: not dec. _____ Date Analyzed: 03/22/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	3.6	J
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	3.8	J
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 1000037900

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B323A

Level: (low/med) LOW Date Received: 03/22/00

% Moisture: not dec. _____ Date Analyzed: 03/22/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0140
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265020

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B329

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 6 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1.1	U
75-01-4	Vinyl chloride	1.1	U
74-83-9	Bromomethane	1.1	U
75-00-3	Chloroethane	1.1	U
75-35-4	1,1-Dichloroethylene	1.1	U
67-64-1	Acetone	4.1	JB
75-15-0	Carbon disulfide	5.3	U
75-09-2	Methylene chloride	5.3	U
75-34-3	1,1-Dichloroethane	1.1	U
108-05-4	Vinyl acetate	5.3	U
78-93-3	2-Butanone	5.3	U
540-59-0	1,2-Dichloroethylene(total)	2.1	U
67-66-3	Chloroform	1.1	U
71-55-6	1,1,1-Trichloroethane	1.1	U
56-23-5	Carbon tetrachloride	1.1	U
107-06-2	1,2-Dichloroethane	1.1	U
71-43-2	Benzene	1.1	U
79-01-6	Trichloroethylene	1.1	U
78-87-5	1,2-Dichloropropane	1.1	U
75-27-4	Bromodichloromethane	1.1	U
10061-01-5	cis-1,3-Dichloropropylene	1.1	U
108-10-1	4-Methyl-2-pentanone	5.3	U
108-88-3	Toluene	1.1	U
10061-02-6	trans-1,3-Dichloropropylene	1.1	U
79-00-5	1,1,2-Trichloroethane	1.1	U
591-78-6	2-Hexanone	5.3	U
127-18-4	Tetrachloroethylene	1.1	U
124-48-1	Dibromochloromethane	1.1	U
108-90-7	Chlorobenzene	1.1	U
100-41-4	Ethylbenzene	1.1	U
1330-20-7	Xylenes (total)	3.2	U
100-42-5	Styrene	1.1	U
75-25-2	Bromoform	1.1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0140
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265020

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B329

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 6 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	1.1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0170
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265021

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B330

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 17 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1.2	U
75-01-4	Vinyl chloride	1.2	U
74-83-9	Bromomethane	1.2	U
75-00-3	Chloroethane	1.2	U
75-35-4	1,1-Dichloroethylene	1.2	U
67-64-1	Acetone	3.9	JB
75-15-0	Carbon disulfide	6.0	U
75-09-2	Methylene chloride	3.1	JB
75-34-3	1,1-Dichloroethane	1.2	U
108-05-4	Vinyl acetate	6.0	U
78-93-3	2-Butanone	6.0	U
540-59-0	1,2-Dichloroethylene(total)	2.4	U
67-66-3	Chloroform	1.2	U
71-55-6	1,1,1-Trichloroethane	1.2	U
56-23-5	Carbon tetrachloride	1.2	U
107-06-2	1,2-Dichloroethane	1.2	U
71-43-2	Benzene	1.2	U
79-01-6	Trichloroethylene	1.2	U
78-87-5	1,2-Dichloropropane	1.2	U
75-27-4	Bromodichloromethane	1.2	U
10061-01-5	cis-1,3-Dichloropropylene	1.2	U
108-10-1	4-Methyl-2-pentanone	6.0	U
108-88-3	Toluene	1.2	U
10061-02-6	trans-1,3-Dichloropropylene	1.2	U
79-00-5	1,1,2-Trichloroethane	1.2	U
591-78-6	2-Hexanone	6.0	U
127-18-4	Tetrachloroethylene	1.2	U
124-48-1	Dibromochloromethane	1.2	U
108-90-7	Chlorobenzene	1.2	U
100-41-4	Ethylbenzene	1.2	U
1330-20-7	Xylenes (total)	3.6	U
100-42-5	Styrene	1.2	U
75-25-2	Bromoform	1.2	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0170
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265021

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B330

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 17 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	1.2	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0180
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265022

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B331

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 20 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1.2	U
75-01-4	Vinyl chloride	1.2	U
74-83-9	Bromomethane	1.2	U
75-00-3	Chloroethane	1.2	U
75-35-4	1,1-Dichloroethylene	1.2	U
67-64-1	Acetone	4.6	JB
75-15-0	Carbon disulfide	6.2	U
75-09-2	Methylene chloride	6.2	U
75-34-3	1,1-Dichloroethane	1.2	U
108-05-4	Vinyl acetate	6.2	U
78-93-3	2-Butanone	6.2	U
540-59-0	1,2-Dichloroethylene(total)	2.5	U
67-66-3	Chloroform	1.2	U
71-55-6	1,1,1-Trichloroethane	1.2	U
56-23-5	Carbon tetrachloride	1.2	U
107-06-2	1,2-Dichloroethane	1.2	U
71-43-2	Benzene	1.2	U
79-01-6	Trichloroethylene	1.2	U
78-87-5	1,2-Dichloropropane	1.2	U
75-27-4	Bromodichloromethane	1.2	U
10061-01-5	cis-1,3-Dichloropropylene	1.2	U
108-10-1	4-Methyl-2-pentanone	6.2	U
108-88-3	Toluene	1.2	U
10061-02-6	trans-1,3-Dichloropropylene	1.2	U
79-00-5	1,1,2-Trichloroethane	1.2	U
591-78-6	2-Hexanone	6.2	U
127-18-4	Tetrachloroethylene	1.2	U
124-48-1	Dibromochloromethane	1.2	U
108-90-7	Chlorobenzene	1.2	U
100-41-4	Ethylbenzene	1.2	U
1330-20-7	Xylenes (total)	3.7	U
100-42-5	Styrene	1.2	U
75-25-2	Bromoform	1.2	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0180
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265022

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B331

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 20 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	1.2	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0190
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265023

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B332

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 4 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	4.0	JB
75-15-0	Carbon disulfide	5.2	U
75-09-2	Methylene chloride	5.2	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.2	U
78-93-3	2-Butanone	5.2	U
540-59-0	1,2-Dichloroethylene(total)	2.1	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.2	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.2	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.1	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0190
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265023

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B332

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 4 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0200
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265024

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B333

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 13 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1.2	U
75-01-4	Vinyl chloride	1.2	U
74-83-9	Bromomethane	1.2	U
75-00-3	Chloroethane	1.2	U
75-35-4	1,1-Dichloroethylene	1.2	U
67-64-1	Acetone	5.8	U
75-15-0	Carbon disulfide	5.8	U
75-09-2	Methylene chloride	5.8	U
75-34-3	1,1-Dichloroethane	1.2	U
108-05-4	Vinyl acetate	5.8	U
78-93-3	2-Butanone	5.8	U
540-59-0	1,2-Dichloroethylene(total)	2.3	U
67-66-3	Chloroform	1.2	U
71-55-6	1,1,1-Trichloroethane	1.2	U
56-23-5	Carbon tetrachloride	1.2	U
107-06-2	1,2-Dichloroethane	1.2	U
71-43-2	Benzene	1.2	U
79-01-6	Trichloroethylene	1.2	U
78-87-5	1,2-Dichloropropane	1.2	U
75-27-4	Bromodichloromethane	1.2	U
10061-01-5	cis-1,3-Dichloropropylene	1.2	U
108-10-1	4-Methyl-2-pentanone	5.8	U
108-88-3	Toluene	1.2	U
10061-02-6	trans-1,3-Dichloropropylene	1.2	U
79-00-5	1,1,2-Trichloroethane	1.2	U
591-78-6	2-Hexanone	5.8	U
127-18-4	Tetrachloroethylene	1.2	U
124-48-1	Dibromochloromethane	1.2	U
108-90-7	Chlorobenzene	1.2	U
100-41-4	Ethylbenzene	1.2	U
1330-20-7	Xylenes (total)	3.5	U
100-42-5	Styrene	1.2	U
75-25-2	Bromoform	1.2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0200
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265024

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B333

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 13 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	1.2	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0210
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265025

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B334

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 19 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1.2	U
75-01-4	Vinyl chloride	1.2	U
74-83-9	Bromomethane	1.2	U
75-00-3	Chloroethane	1.2	U
75-35-4	1,1-Dichloroethylene	1.2	U
67-64-1	Acetone	4.2	JB
75-15-0	Carbon disulfide	6.2	U
75-09-2	Methylene chloride	6.2	U
75-34-3	1,1-Dichloroethane	1.2	U
108-05-4	Vinyl acetate	6.2	U
78-93-3	2-Butanone	6.2	U
540-59-0	1,2-Dichloroethylene(total)	2.5	U
67-66-3	Chloroform	1.2	U
71-55-6	1,1,1-Trichloroethane	1.2	U
56-23-5	Carbon tetrachloride	1.2	U
107-06-2	1,2-Dichloroethane	1.2	U
71-43-2	Benzene	1.2	U
79-01-6	Trichloroethylene	1.2	U
78-87-5	1,2-Dichloropropane	1.2	U
75-27-4	Bromodichloromethane	1.2	U
10061-01-5	cis-1,3-Dichloropropylene	1.2	U
108-10-1	4-Methyl-2-pentanone	6.2	U
108-88-3	Toluene	1.2	U
10061-02-6	trans-1,3-Dichloropropylene	1.2	U
79-00-5	1,1,2-Trichloroethane	1.2	U
591-78-6	2-Hexanone	6.2	U
127-18-4	Tetrachloroethylene	1.2	U
124-48-1	Dibromochloromethane	1.2	U
108-90-7	Chlorobenzene	1.2	U
100-41-4	Ethylbenzene	1.2	U
1330-20-7	Xylenes (total)	3.7	U
100-42-5	Styrene	1.2	U
75-25-2	Bromoform	1.2	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0210
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265025

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B334

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 19 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	1.2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0222
000316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265026

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B335

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 4 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	3.5	JB
75-15-0	Carbon disulfide	5.2	U
75-09-2	Methylene chloride	1.6	JB
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.2	U
78-93-3	2-Butanone	5.2	U
540-59-0	1,2-Dichloroethylene(total)	2.1	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.2	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.2	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	1.4	J
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0222
000316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265026

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B335

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 4 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0230
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265027

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B336

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 23 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1.3	U
75-01-4	Vinyl chloride	1.3	U
74-83-9	Bromomethane	1.3	U
75-00-3	Chloroethane	1.3	U
75-35-4	1,1-Dichloroethylene	1.3	U
67-64-1	Acetone	4.7	JB
75-15-0	Carbon disulfide	6.5	U
75-09-2	Methylene chloride	2.5	JB
75-34-3	1,1-Dichloroethane	1.3	U
108-05-4	Vinyl acetate	6.5	U
78-93-3	2-Butanone	6.5	U
540-59-0	1,2-Dichloroethylene(total)	2.6	U
67-66-3	Chloroform	1.3	U
71-55-6	1,1,1-Trichloroethane	1.3	U
56-23-5	Carbon tetrachloride	1.3	U
107-06-2	1,2-Dichloroethane	1.3	U
71-43-2	Benzene	1.3	U
79-01-6	Trichloroethylene	1.3	U
78-87-5	1,2-Dichloropropane	1.3	U
75-27-4	Bromodichloromethane	1.3	U
10061-01-5	cis-1,3-Dichloropropylene	1.3	U
108-10-1	4-Methyl-2-pentanone	6.5	U
108-88-3	Toluene	0.46	J
10061-02-6	trans-1,3-Dichloropropylene	1.3	U
79-00-5	1,1,2-Trichloroethane	1.3	U
591-78-6	2-Hexanone	6.5	U
127-18-4	Tetrachloroethylene	1.3	U
124-48-1	Dibromochloromethane	1.3	U
108-90-7	Chlorobenzene	1.3	U
100-41-4	Ethylbenzene	1.3	U
1330-20-7	Xylenes (total)	3.9	U
100-42-5	Styrene	1.3	U
75-25-2	Bromoform	1.3	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

065-0230
00316-30

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265027

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B336

Level: (low/med) LOW Date Received: 03/18/00

% Moisture: not dec. 23 Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	1.3	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 1000038217

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B407A

Level: (low/med) LOW Date Received: 03/23/00

% Moisture: not dec. _____ Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	3.3	J
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 1000038217

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B407A

Level: (low/med) LOW Date Received: 03/23/00

% Moisture: not dec. _____ Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

076-4000
00315-12

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265036

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B412

Level: (low/med) LOW Date Received: 03/23/00

% Moisture: not dec. _____ Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	6.5	B
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	6.1	
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.2	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

076-4000
00315-12

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 23265

Matrix: (soil/water) SOIL Lab Sample ID: 23265036

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1B412

Level: (low/med) LOW Date Received: 03/23/00

% Moisture: not dec. _____ Date Analyzed: 03/23/00

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

General Engineering Laboratories, Inc.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1000042024
Sample Location:
Sample Date:
Sample Matrix: WATER
Analysis Type: VOA
Data Type: MS DATA
Misc Info: |VOAQC_LF| VBLK01

Client SDG: 23265
Client Smp ID: VBLK01
Sample Point:
Date Received: 23-MAR-2000
Quant Type: ISTD
Level: LOW
Operator: RMB

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug/l	Q
1330-20-7	Xylenes (total)	3.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
67-64-1	Acetone	3.3	J
75-35-4	1,1-Dichloroethylene	1.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	1.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-90-7	Chlorobenzene	1.0	U
----------	m,p-Xylenes	2.0	U
95-47-6	o-Xylene	1.0	U

General Engineering Laboratories, Inc.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1000042024
Sample Location:
Sample Date:
Sample Matrix: WATER
Analysis Type: VOA
Data Type: MS DATA
Misc Info: |VOAQC_LF| VBLK01

Client SDG: 23265
Client Smp ID: VBLK01
Sample Point:
Date Received: 23-MAR-2000
Quant Type: ISTD
Level: LOW
Operator: RMB

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug/l	Q
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
1868-53-7	Dibromofluoromethane	48.2	
2037-26-5	Toluene-d8	53.7	
460-00-4	Bromofluorobenzene	51.3	

General Engineering Laboratories, Inc.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 23265036
Sample Location:
Sample Date:
Sample Matrix: WATER
Analysis Type: VOA
Data Type: MS DATA
Misc Info: |VOA8260ALF| BRKL neat ph=2 trip blank

Client SDG: 23265
Client Smp ID: 076-400000315-12
Sample Point:
Date Received: 23-MAR-2000
Quant Type: ISTD
Level: LOW
Operator: RMB

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug/l	Q
1330-20-7	Xylenes (total)	3.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
67-64-1	Acetone	6.5	
75-35-4	1,1-Dichloroethylene	1.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	6.1	
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	1.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.2	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-90-7	Chlorobenzene	1.0	U
----------	m,p-Xylenes	2.0	U
95-47-6	o-Xylene	1.0	U

General Engineering Laboratories, Inc.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 23265036
Sample Location:
Sample Date:
Sample Matrix: WATER
Analysis Type: VOA
Data Type: MS DATA
Misc Info: |VOA8260ALF| BRKL neat ph=2 trip blank

Client SDG: 23265
Client Smp ID: 076-400000315-12
Sample Point:
Date Received: 23-MAR-2000
Quant Type: ISTD
Level: LOW
Operator: RMB

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug/l	Q
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
1868-53-7	Dibromofluoromethane	48.3	
2037-26-5	Toluene-d8	52.7	
460-00-4	Bromofluorobenzene	52.4	

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID:	065-007000316-36	Project:	BRKL00297
Sample ID:	23265007	Client ID:	BRKL001
Matrix:	Soil	COC:	6521
Collect Date:	16-MAR-00 13:55		
Receive Date:	18-MAR-00 12:00		
Collector:	Client		
Moisture:	22.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury		44.3	16.8	36.9	ug/kg	1	RMJ	03/22/00	1743	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-283	203	1250	ug/kg	2	AME	03/22/00	1043	17350	2
Arsenic		1100	325	623	ug/kg	2					
Barium		8470	116	623	ug/kg	2					
Beryllium	J	118	77.5	623	ug/kg	2					
Cadmium	U	11.9	95.0	623	ug/kg	2					
Calcium		413000	4300	12500	ug/kg	2					
Chromium		5330	161	623	ug/kg	2					
Cobalt		1040	138	623	ug/kg	2					
Copper		3670	249	623	ug/kg	2					
Iron		3520000	2840	6230	ug/kg	2					
Lead		8460	247	623	ug/kg	2					
Magnesium		445000	458	2490	ug/kg	2					
Manganese		45100	220	1250	ug/kg	2					
Nickel		2410	179	623	ug/kg	2					
Potassium		171000	5720	12500	ug/kg	2					
Selenium	U	75.4	362	623	ug/kg	2					
Silver	U	74.6	250	623	ug/kg	2					
Thallium	U	-1080	511	1250	ug/kg	2					
Vanadium		6860	184	623	ug/kg	2					
Zinc		54100	343	623	ug/kg	2					
Aluminum		2140000	1530	6230	ug/kg	2	KAR	03/29/00	1854	18426	3
Sodium		58400	713	11700	ug/kg	2	KAR	04/04/00	1606	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 3550B	3550B BNA Soil Prep-8270C Analysis Fed	RDH	03/21/00	1309	17219
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-007000316-36
Sample ID: 23265007

Project: BRKL00297
Client ID: BRKL001
COC: 6

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Analytical Methods were performed

Method	Description
1	SW846 7471A
2	SW846 6010B
3	SW846 6010B
4	SW846 6010B

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-008000316-36
Sample ID: 23265008
Matrix: Soil
Collect Date: 16-MAR-00 14:00
Receive Date: 18-MAR-00 12:00
Collector: Client
Moisture: 22.3%

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury	U	15.6	17.7	39.0	ug/kg	1	RMJ	03/22/00	1745	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-32.9	198	1210	ug/kg	2	AME	03/22/00	1049	17350	2
Arsenic		1030	317	607	ug/kg	2					
Barium		6750	113	607	ug/kg	2					
Beryllium	J	98.1	75.5	607	ug/kg	2					
Cadmium	U	-58.9	92.6	607	ug/kg	2					
Calcium		286000	4190	12100	ug/kg	2					
Chromium		4570	157	607	ug/kg	2					
Cobalt		1050	135	607	ug/kg	2					
Copper		2510	243	607	ug/kg	2					
Iron		3660000	2770	6070	ug/kg	2					
Lead		3460	240	607	ug/kg	2					
Magnesium		520000	447	2430	ug/kg	2					
Manganese		50700	215	1210	ug/kg	2					
Nickel		2360	175	607	ug/kg	2					
Potassium		181000	5570	12100	ug/kg	2					
Selenium	U	-121	353	607	ug/kg	2					
Silver	U	36.4	244	607	ug/kg	2					
Thallium	U	-951	498	1210	ug/kg	2					
Vanadium		6290	180	607	ug/kg	2					
Zinc		12600	334	607	ug/kg	2					
Aluminum		1910000	1570	6370	ug/kg	2	KAR	03/29/00	1900	18426	3
Sodium		37500	771	12600	ug/kg	2	KAR	04/04/00	1612	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 3550B	3550B BNA Soil Prep-8270C Analysis Fed	RDH	03/21/00	1309	17219
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-008000316-36
Sample ID: 23265008

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Analytical Methods were performed

Method	Description
1	SW846 7471A
2	SW846 6010B
3	SW846 6010B
4	SW846 6010B

Notes:
The Qualifiers in this report are defined as follows :

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** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-009000316-36
Sample ID: 23265009
Matrix: Soil
Collect Date: 16-MAR-00 14:05
Receive Date: 18-MAR-00 12:00
Collector: Client
Moisture: 6.64%

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury	J	21.9	13.9	30.5	ug/kg	1	RMJ	03/22/00	1750	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-135	165	1010	ug/kg	2	AME	03/22/00	1055	17350	2
Arsenic		965	264	505	ug/kg	2					
Barium		8070	93.9	505	ug/kg	2					
Beryllium	J	110	62.9	505	ug/kg	2					
Cadmium	U	-18	77.1	505	ug/kg	2					
Calcium		470000	3490	10100	ug/kg	2					
Chromium		3710	130	505	ug/kg	2					
Cobalt		1070	112	505	ug/kg	2					
Copper		3270	202	505	ug/kg	2					
Iron		3370000	2300	5050	ug/kg	2					
Lead		7310	200	505	ug/kg	2					
Magnesium		455000	372	2020	ug/kg	2					
Manganese		44900	179	1010	ug/kg	2					
Nickel		2280	146	505	ug/kg	2					
Potassium		197000	4640	10100	ug/kg	2					
Selenium	U	15.4	294	505	ug/kg	2					
Silver	U	13.7	203	505	ug/kg	2					
Thallium	U	-671	414	1010	ug/kg	2					
Vanadium		5850	150	505	ug/kg	2					
Zinc		26900	278	505	ug/kg	2					
Aluminum		2890000	1280	5200	ug/kg	2	KAR	03/29/00	1907	18426	3
Sodium		32400	606	9920	ug/kg	2	KAR	04/04/00	1618	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 3550B	3550B BNA Soil Prep-8270C Analysis Fed	RDH	03/21/00	1309	17219
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-009000316-36
Sample ID: 23265009

Project: BRKL00297
Client ID: BR u01
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

The following Analytical Methods were performed

Method	Description
1	SW846 7471A
2	SW846 6010B
3	SW846 6010B
4	SW846 6010B

Notes:
The Qualifiers in this report are defined as follows :

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** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000.

Client Sample ID: 065-010000316-36
Sample ID: 23265010
Matrix: Soil
Collect Date: 16-MAR-00 14:10
Receive Date: 18-MAR-00 12:00
Collector: Client
Moisture: 3.88%

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury	J	20.9	13.7	30.1	ug/kg	1	RMJ	03/22/00	1752	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-228	165	1010	ug/kg	2	AME	03/22/00	1100	17350	2
Arsenic		927	264	505	ug/kg	2					
Barium		7910	93.8	505	ug/kg	2					
Beryllium	J	112	62.8	505	ug/kg	2					
Cadmium	U	-40.4	77.1	505	ug/kg	2					
Calcium		336000	3480	10100	ug/kg	2					
Chromium		3610	130	505	ug/kg	2					
Cobalt		1090	112	505	ug/kg	2					
Copper		3250	202	505	ug/kg	2					
Iron		2980000	2300	5050	ug/kg	2					
Lead		3020	200	505	ug/kg	2					
Magnesium		640000	372	2020	ug/kg	2					
Manganese		59600	179	1010	ug/kg	2					
Nickel		2550	145	505	ug/kg	2					
Potassium		225000	4640	10100	ug/kg	2					
Selenium	U	84.2	294	505	ug/kg	2					
Silver	U	-23	203	505	ug/kg	2					
Thallium	U	-803	414	1010	ug/kg	2					
Vanadium		4990	149	505	ug/kg	2					
Zinc		9450	278	505	ug/kg	2					
Aluminum		1420000	1200	4860	ug/kg	2	KAR	03/29/00	1926	18426	3
Sodium		24400	583	9540	ug/kg	2	KAR	04/04/00	1624	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 3550B	3550B BNA Soil Prep-8270C Analysis Fed	RDH	03/21/00	1309	17219
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-010000316-36
Sample ID: 23265010

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

The following Analytical Methods were performed

Method	Description
1	SW846 7471A
2	SW846 6010B
3	SW846 6010B
4	SW846 6010B

Notes:
The Qualifiers in this report are defined as follows :

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**	Indicates the analyte is a surrogate compound.
DL	Failed required detection limit.
J	Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI	Not quantified due to interference.
U	Indicates the compound was analyzed for but not detected above the detection limit
U	Sample result < .5*MDA and MDA <= RDL.
UJ	.5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q	Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID:	065-011000316-36	Project:	BRKL00297
Sample ID:	23265011	Client ID:	BRKL001
Matrix:	Soil	COC:	6521
Collect Date:	16-MAR-00 14:15		
Receive Date:	18-MAR-00 12:00		
Collector:	Client		
Moisture:	6.27%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury	J	18.0	13.7	30.1	ug/kg	1	RMJ	03/22/00	1753	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	82.2	164	1010	ug/kg	2	AME	03/22/00	1106	17350	2
Arsenic		1020	263	503	ug/kg	2					
Barium		10800	93.5	503	ug/kg	2					
Beryllium	J	130	62.6	503	ug/kg	2					
Cadmium	U	-70.6	76.8	503	ug/kg	2					
Calcium		492000	3470	10100	ug/kg	2					
Chromium		4430	130	503	ug/kg	2					
Cobalt		1260	112	503	ug/kg	2					
Copper		3060	201	503	ug/kg	2					
Iron		3830000	2290	5030	ug/kg	2					
Lead		6000	199	503	ug/kg	2					
Magnesium		578000	370	2010	ug/kg	2					
Manganese		48900	178	1010	ug/kg	2					
Nickel		2710	145	503	ug/kg	2					
Potassium		229000	4620	10100	ug/kg	2					
Selenium	U	30.4	293	503	ug/kg	2					
Silver	U	46.5	202	503	ug/kg	2					
Thallium	U	-678	413	1010	ug/kg	2					
Vanadium		6660	149	503	ug/kg	2					
Zinc		12600	277	503	ug/kg	2					
Aluminum		3830000	1250	5080	ug/kg	2	KAR	03/29/00	1932	18426	3
Sodium		47100	652	10700	ug/kg	2	KAR	04/04/00	1631	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 3550B	3550B BNA Soil Prep-8270C Analysis Fed	RDH	03/21/00	1309	17219
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-011000316-36
Sample ID: 23265011

Project: BRKL00297
Client I: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

The following Analytical Methods were performed

Method	Description
1	SW846 7471A
2	SW846 6010B
3	SW846 6010B
4	SW846 6010B

Notes:
The Qualifiers in this report are defined as follows :

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** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID:	065-012000316-36	Project:	BRKL00297
Sample ID:	23265012	Client ID:	BRKL001
Matrix:	Soil	COC:	6521
Collect Date:	16-MAR-00 14:17		
Receive Date:	18-MAR-00 12:00		
Collector:	Client		
Moisture:	9.15%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury		268	13.2	29.1	ug/kg	1	RMJ	03/22/00	1755	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-130	165	1010	ug/kg	2	AME	03/22/00	1112	17350	2
Arsenic		763	264	505	ug/kg	2					
Barium		5770	93.8	505	ug/kg	2					
Beryllium	J	83.0	62.8	505	ug/kg	2					
Cadmium	U	-25.1	77.1	505	ug/kg	2					
Calcium		265000	3480	10100	ug/kg	2					
Chromium		5590	130	505	ug/kg	2					
Cobalt		722	112	505	ug/kg	2					
Copper		2710	202	505	ug/kg	2					
Iron		2370000	2300	5050	ug/kg	2					
Lead		2930	200	505	ug/kg	2					
Magnesium		325000	372	2020	ug/kg	2					
Manganese		35700	179	1010	ug/kg	2					
Nickel		1650	145	505	ug/kg	2					
Potassium		141000	4640	10100	ug/kg	2					
Selenium	U	-14.6	294	505	ug/kg	2					
Silver	U	7.24	203	505	ug/kg	2					
Thallium	U	-619	414	1010	ug/kg	2					
Vanadium		4660	149	505	ug/kg	2					
Zinc		7170	278	505	ug/kg	2					
Aluminum		1670000	1290	5240	ug/kg	2	KAR	03/29/00	1938	18426	3
Sodium		34900	611	10000	ug/kg	2	KAR	04/04/00	1637	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 3550B	3550B BNA Soil Prep-8270C Analysis Fed	RDH	03/21/00	1309	17219
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-012000316-36
Sample ID: 23265012

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

The following Analytical Methods were performed

Method	Description
1	SW846 7471A
2	SW846 6010B
3	SW846 6010B
4	SW846 6010B

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID:	065-014000316-36	Project:	BRKL002
Sample ID:	23265013	Client ID:	BRKL001
Matrix:	Soil	COC:	6521
Collect Date:	16-MAR-00 14:37		
Receive Date:	18-MAR-00 12:00		
Collector:	Client		
Moisture:	18.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury	J	17.0	15.3	33.6	ug/kg	1	RMJ	03/22/00	1757	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-265	184	1130	ug/kg	2	AME	03/22/00	1129	17350	2
Arsenic	J	300	295	566	ug/kg	2					
Barium		2240	105	566	ug/kg	2					
Beryllium	U	67.0	70.4	566	ug/kg	2					
Cadmium	U	-20.8	86.4	566	ug/kg	2					
Calcium		62600	3900	11300	ug/kg	2					
Chromium		2870	146	566	ug/kg	2					
Cobalt	J	378	126	566	ug/kg	2					
Copper		2140	226	566	ug/kg	2					
Iron		1890000	2580	5660	ug/kg	2					
Lead		952	224	566	ug/kg	2					
Magnesium		215000	416	2260	ug/kg	2					
Manganese		29200	200	1130	ug/kg	2					
Nickel		1030	163	566	ug/kg	2					
Potassium		80800	5190	11300	ug/kg	2					
Selenium	U	-20.2	329	566	ug/kg	2					
Silver	U	43.0	227	566	ug/kg	2					
Thallium	U	-704	464	1130	ug/kg	2					
Vanadium		3460	168	566	ug/kg	2					
Zinc		4250	311	566	ug/kg	2					
Aluminum		739000	1420	5770	ug/kg	2	KAR	03/29/00	1944	18426	3
Sodium		24600	725	11900	ug/kg	2	KAR	04/04/00	1643	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Method	Description

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-014000316-36
Sample ID: 23265013

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
1	SW846 7471A									
2	SW846 6010B									
3	SW846 6010B									
4	SW846 6010B									

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-017000316-36
Sample ID: 23265038
Matrix: Soil
Collect Date: 16-MAR-00 14:42
Receive Date: 18-MAR-00 12:00
Collector: Client
Moisture: 10.9%

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury		55.8	15.6	34.3	ug/kg	1	RMJ	03/28/00	1340	18179	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Aluminum		3840000	1330	5390	ug/kg	2	KAR	03/23/00	2351	17814	2
Antimony	U	-63.9	176	1080	ug/kg	2					
Arsenic		1280	282	539	ug/kg	2					
Barium		9620	100	539	ug/kg	2					
Beryllium	J	133	67.1	539	ug/kg	2					
Cadmium	U	-33.9	82.3	539	ug/kg	2					
Calcium		403000	3720	10800	ug/kg	2					
Chromium		4240	139	539	ug/kg	2					
Cobalt		1420	120	539	ug/kg	2					
Copper		2910	216	539	ug/kg	2					
Iron		3950000	2460	5390	ug/kg	2					
Lead		7840	214	539	ug/kg	2					
Magnesium		549000	397	2160	ug/kg	2					
Manganese		52400	191	1080	ug/kg	2					
Nickel		2760	155	539	ug/kg	2					
Potassium		196000	4950	10800	ug/kg	2					
Selenium	U	67.9	314	539	ug/kg	2					
Silver	U	5.07	217	539	ug/kg	2					
Sodium		43100	659	10800	ug/kg	2					
Thallium	U	-513	442	1080	ug/kg	2					
Vanadium		6860	160	539	ug/kg	2					
Zinc		18700	297	539	ug/kg	2					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	03/22/00	1900	17367
SW846 3550B	3550B BNA Soil Prep-8270C Analysis Fed	RDH	04/07/00	0846	19846
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/23/00	2040	17370

The following Analytical Methods were performed

Method	Description
1	SW846 7471A

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-017000316-36
Sample ID: 23265038

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
2	SW846 6010B										

Notes:
The Qualifiers in this report are defined as follows :

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** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-018000316-36
Sample ID: 23265014
Matrix: Soil
Collect Date: 16-MAR-00 14:52
Receive Date: 18-MAR-00 12:00
Collector: Client
Moisture: 3.81%

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury	U	1.93	13.3	29.3	ug/kg	1	RMJ	03/22/00	1758	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-25.5	161	990	ug/kg	2	AME	03/22/00	1135	17350	2
Arsenic		502	258	495	ug/kg	2					
Barium		4220	92.0	495	ug/kg	2					
Beryllium	J	66.1	61.6	495	ug/kg	2					
Cadmium	U	-15.3	75.5	495	ug/kg	2					
Calcium		207000	3420	9900	ug/kg	2					
Chromium		2320	128	495	ug/kg	2					
Cobalt		658	110	495	ug/kg	2					
Copper		2090	198	495	ug/kg	2					
Iron		1850000	2260	4950	ug/kg	2					
Lead		2470	196	495	ug/kg	2					
Magnesium		240000	364	1980	ug/kg	2					
Manganese		31600	175	990	ug/kg	2					
Nickel		1490	143	495	ug/kg	2					
Potassium		112000	4540	9900	ug/kg	2					
Selenium	U	51.0	288	495	ug/kg	2					
Silver	U	35.2	199	495	ug/kg	2					
Thallium	U	-589	406	990	ug/kg	2					
Vanadium		3580	147	495	ug/kg	2					
Zinc		4770	272	495	ug/kg	2					
Aluminum		1390000	1220	4950	ug/kg	2	KAR	03/29/00	1951	18426	3
Sodium		18200	635	10400	ug/kg	2	KAR	04/04/00	1649	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Method	Description

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-018000316-36
Sample ID: 23265014

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
1	SW846 7471A									
2	SW846 6010B									
3	SW846 6010B									
4	SW846 6010B									

Notes:
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DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID:	065-019000316-36	Project:	BRKL00297
Sample ID:	23265015	Client ID:	BRKL001
Matrix:	Soil	COC:	6521
Collect Date:	16-MAR-00 15:07		
Receive Date:	18-MAR-00 12:00		
Collector:	Client		
Moisture:	23.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury	J	19.2	19.0	41.8	ug/kg	1	RMJ	03/22/00	1800	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-82.3	202	1240	ug/kg	2	AME	03/22/00	1140	17350	2
Arsenic	J	556	323	620	ug/kg	2					
Barium		3400	115	620	ug/kg	2					
Beryllium	J	81.7	77.1	620	ug/kg	2					
Cadmium	U	-15.5	94.5	620	ug/kg	2					
Calcium		169000	4270	12400	ug/kg	2					
Chromium		2540	160	620	ug/kg	2					
Cobalt		676	138	620	ug/kg	2					
Copper		3670	248	620	ug/kg	2					
Iron		2010000	2830	6200	ug/kg	2					
Lead		1620	245	620	ug/kg	2					
Magnesium		312000	456	2480	ug/kg	2					
Manganese		36000	219	1240	ug/kg	2					
Nickel		1810	178	620	ug/kg	2					
Potassium		98600	5690	12400	ug/kg	2					
Selenium	U	1.12	361	620	ug/kg	2					
Silver	U	30.1	249	620	ug/kg	2					
Thallium	U	-637	508	1240	ug/kg	2					
Vanadium		3540	183	620	ug/kg	2					
Zinc		5420	341	620	ug/kg	2					
Aluminum		1430000	1570	6380	ug/kg	2	KAR	03/29/00	1957	18426	3
Sodium		56800	795	13000	ug/kg	2	KAR	04/04/00	1655	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Method	Description

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-019000316-36
Sample ID: 23265015

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
1	SW846 7471A									
2	SW846 6010B									
3	SW846 6010B									
4	SW846 6010B									

Notes:
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DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID:	065-020000316-36	Pro	BRKL00297
Sample ID:	23265016	Client ID:	.01
Matrix:	Soil	COC:	6521
Collect Date:	16-MAR-00 15:17		
Receive Date:	18-MAR-00 12:00		
Collector:	Client		
Moisture:	9.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury		28.5	12.8	28.2	ug/kg	1	RMJ	03/22/00	1802	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-136	169	1040	ug/kg	2	AME	03/22/00	1146	17350	2
Arsenic		876	271	519	ug/kg	2					
Barium		7840	96.4	519	ug/kg	2					
Beryllium	J	103	64.6	519	ug/kg	2					
Cadmium	U	-44.9	79.2	519	ug/kg	2					
Calcium		448000	3580	10400	ug/kg	2					
Chromium		3390	134	519	ug/kg	2					
Cobalt		978	115	519	ug/kg	2					
Copper		3240	208	519	ug/kg	2					
Iron		3020000	2370	5190	ug/kg	2					
Lead		5390	205	519	ug/kg	2					
Magnesium		415000	382	2080	ug/kg	2					
Manganese		42500	184	1040	ug/kg	2					
Nickel		2070	149	519	ug/kg	2					
Potassium		183000	4760	10400	ug/kg	2					
Selenium	U	-77.8	302	519	ug/kg	2					
Silver	U	17.1	209	519	ug/kg	2					
Thallium	U	-912	426	1040	ug/kg	2					
Vanadium		5640	154	519	ug/kg	2					
Zinc		14800	285	519	ug/kg	2					
Aluminum		2900000	1340	5450	ug/kg	2	KAR	03/29/00	2003	18426	3
Sodium		33500	634	10400	ug/kg	2	KAR	04/04/00	1701	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Method	Description

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-020000316-36
Sample ID: 23265016

Project: BRKL00297
Client ID: BRKL001
SDG: 6

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
1		SW846 7471A									
2		SW846 6010B									
3		SW846 6010B									
4		SW846 6010B									

Notes:
The Qualifiers in this report are defined as follows :

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** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-021000316-36
Sample ID: 23265017
Matrix: Soil
Collect Date: 16-MAR-00 15:30
Receive Date: 18-MAR-00 12:00
Collector: Client
Moisture: 6.55%

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury		47.0	13.1	28.8	ug/kg	1	RMJ	03/22/00	1804	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-147	168	1030	ug/kg	2	AME	03/22/00	1152	17350	2
Arsenic		973	269	514	ug/kg	2					
Barium		11800	95.6	514	ug/kg	2					
Beryllium	J	113	64.0	514	ug/kg	2					
Cadmium	U	-52.3	78.5	514	ug/kg	2					
Calcium		546000	3550	10300	ug/kg	2					
Chromium		4000	133	514	ug/kg	2					
Cobalt		1190	114	514	ug/kg	2					
Copper		3490	206	514	ug/kg	2					
Iron		3800000	2350	5140	ug/kg	2					
Lead		7270	204	514	ug/kg	2					
Magnesium		488000	379	2060	ug/kg	2					
Manganese		48000	182	1030	ug/kg	2					
Nickel		2470	148	514	ug/kg	2					
Potassium		178000	4720	10300	ug/kg	2					
Selenium	U	-100	299	514	ug/kg	2					
Silver	U	120	207	514	ug/kg	2					
Thallium	U	-641	422	1030	ug/kg	2					
Vanadium		6330	152	514	ug/kg	2					
Zinc		17100	283	514	ug/kg	2					
Aluminum		3000000	1230	5000	ug/kg	2	KAR	03/29/00	2009	18426	3
Sodium		34600	617	10100	ug/kg	2	KAR	04/04/00	1720	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Method	Description

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-021000316-36
Sample ID: 23265017

Project: BRKL00297
Client ID: BRKL001
COC : 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
1		SW846 7471A									
2		SW846 6010B									
3		SW846 6010B									
4		SW846 6010B									

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-022000316-36
Sample ID: 23265018
Matrix: Soil
Collect Date: 16-MAR-00 15:40
Receive Date: 18-MAR-00 12:00
Collector: Client
Moisture: 21.8%

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury		68.2	17.7	39.0	ug/kg	1	RMJ	03/22/00	1805	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-321	202	1240	ug/kg	2	AME	03/22/00	1157	17350	2
Arsenic		1120	324	621	ug/kg	2					
Barium		11000	115	621	ug/kg	2					
Beryllium	J	159	77.3	621	ug/kg	2					
Cadmium	U	-59.9	94.8	621	ug/kg	2					
Calcium		415000	4290	12400	ug/kg	2					
Chromium		4540	160	621	ug/kg	2					
Cobalt		1410	138	621	ug/kg	2					
Copper		3080	248	621	ug/kg	2					
Iron		3910000	2830	6210	ug/kg	2					
Lead		15200	246	621	ug/kg	2					
Magnesium		607000	457	2480	ug/kg	2					
Manganese		65000	220	1240	ug/kg	2					
Nickel		2990	179	621	ug/kg	2					
Potassium		260000	5700	12400	ug/kg	2					
Selenium	U	-310	361	621	ug/kg	2					
Silver	U	85.0	250	621	ug/kg	2					
Thallium	U	-891	509	1240	ug/kg	2					
Vanadium		6340	184	621	ug/kg	2					
Zinc		9680	342	621	ug/kg	2					
Aluminum		1700000	1500	6090	ug/kg	2	KAR	03/29/00	2016	18426	3
Sodium		42300	744	12200	ug/kg	2	KAR	04/04/00	1726	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Method	Description

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-022000316-36
Sample ID: 23265018

Project: BRKL00297
Client ID: BRKL001
QC:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
1		SW846 7471A									
2		SW846 6010B									
3		SW846 6010B									
4		SW846 6010B									

Notes:
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** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on a dry weight basis.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID:	065-023000316-36	Project:	BRKL00297
Sample ID:	23265019	Client ID:	BRKL001
Matrix:	Soil	COC:	6521
Collect Date:	16-MAR-00 15:50		
Receive Date:	18-MAR-00 12:00		
Collector:	Client		
Moisture:	20.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis Federal											
7471 Cold Vapor Hg in Solid											
Mercury	J	38.1	17.9	39.3	ug/kg	1	RMJ	03/23/00	1120	17479	1
Metals Analysis-ICP Federal											
6010 TAL Metals Soil Federal											
Antimony	U	-28.8	200	1230	ug/kg	2	AME	03/22/00	1203	17350	2
Arsenic	J	428	320	614	ug/kg	2					
Barium		9470	114	614	ug/kg	2					
Beryllium	J	88.4	76.3	614	ug/kg	2					
Cadmium	U	-25.5	93.7	614	ug/kg	2					
Calcium		328000	4230	12300	ug/kg	2					
Chromium		2640	158	614	ug/kg	2					
Cobalt		801	136	614	ug/kg	2					
Copper		2400	245	614	ug/kg	2					
Iron		2480000	2800	6140	ug/kg	2					
Lead		5530	243	614	ug/kg	2					
Magnesium		374000	452	2450	ug/kg	2					
Manganese		48700	217	1230	ug/kg	2					
Nickel		2080	177	614	ug/kg	2					
Potassium		143000	5630	12300	ug/kg	2					
Selenium	U	-135	357	614	ug/kg	2					
Silver	U	44.1	247	614	ug/kg	2					
Thallium	U	-883	503	1230	ug/kg	2					
Vanadium		3950	182	614	ug/kg	2					
Zinc		8900	338	614	ug/kg	2					
Aluminum		2300000	1500	6080	ug/kg	2	KAR	03/29/00	2022	18426	3
Sodium		60200	750	12300	ug/kg	2	KAR	04/04/00	1732	19407	4

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	846 3050BS PREP	AJM	04/03/00	1915	19148
SW846 3050B	846 3050BS PREP	FDG	03/21/00	1350	17195
SW846 3050B	846 3050BS PREP	FDG	03/28/00	1300	18293
SW846 7471A	EPA 7471 Mercury Prep Soil	ARD	03/21/00	1945	17182

The following Analytical Methods were performed

Method	Description

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-023000316-36
Sample ID: 23265019

Project: BRKL00297
Client ID: BRKL001
COC: 6521

	Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
1												SW846 7471A
2												SW846 6010B
3												SW846 6010B
4												SW846 6010B

Notes:
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RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

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Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-007000316-36
Sample ID: 23265001
Matrix: Soil
Collect Date: 16-MAR-00 13:55
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gamma Spec												
Gammaspec, Gamma, solid												
Americium-241	UUJ	0.0129	+/-0.0548	0.0955	4.00	pCi/g	1	SRB	03/22/00	1719	17475	1
Beryllium-7	UUJ	0.0081	+/-0.119	0.214	1.00	pCi/g	1					
Cesium-134	UUJ	-0.00503	+/-0.013	0.0202	0.100	pCi/g	1					
Cesium-137		0.261	+/-0.0437	0.0261	2.30	pCi/g	1					
Cobalt-57	UUJ	0.00315	+/-0.00912	0.017	0.100	pCi/g	1					
Cobalt-60	UUJ	0.00281	+/-0.0153	0.0289	0.100	pCi/g	1					
Europium-152	UUJ	-0.00641	+/-0.0345	0.0628	4.80	pCi/g	1					
Europium-154	UUJ	0.00925	+/-0.0397	0.0758	17.0	pCi/g	1					
Europium-155	UJ	0.0493	+/-0.0522	0.0704	0.200	pCi/g	1					
Manganese-54	UUJ	0.00169	+/-0.012	0.0224	0.100	pCi/g	1					
Radium-226		0.258	+/-0.0639	0.0426	1.00	pCi/g	1					
Sodium-22	UUJ	0.0034	+/-0.0141	0.0271	0.700	pCi/g	1					
Vanadium-48	UUJ	0.00169	+/-0.0189	0.0301	1.00	pCi/g	1					
Zinc-65	UUJ	0.00167	+/-0.0348	0.0564	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		2.15	+/-0.693	0.835	1.00	pCi/g	1	JDM	03/23/00	2155	17491	2
Beta		5.84	+/-1.17	1.71	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	0.362	+/-1.53	3.72	7.50	pCi/g	1	AAK	03/29/00	1754	18120	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	EPA 900
3	EPA 905.0

Notes:
The Qualifiers in this report are defined as follows :

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-007000316-36
Sample ID: 23265001

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
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DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

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Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-008000316-36
Sample ID: 23265002
Matrix: Soil
Collect Date: 16-MAR-00 14:00
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gamma Spec												
Gammaspec, Gamma, solid												
Americium-241	UUJ	-0.016	+/-0.0482	0.0867	4.00	pCi/g	1	SRB	03/22/00	1720	17475	1
Beryllium-7	UUJ	0.0215	+/-0.0894	0.172	1.00	pCi/g	1					
Cesium-134	UUJ	0.007	+/-0.0112	0.0196	0.100	pCi/g	1					
Cesium-137		0.0631	+/-0.0256	0.0231	2.30	pCi/g	1					
Cobalt-57	UUJ	-0.00675	+/-0.0075	0.0139	0.100	pCi/g	1					
Cobalt-60	UUJ	0.00419	+/-0.0141	0.027	0.100	pCi/g	1					
Europium-152	UUJ	0.00936	+/-0.0333	0.0608	4.80	pCi/g	1					
Europium-154	UUJ	-0.0144	+/-0.0342	0.0608	17.0	pCi/g	1					
Europium-155	UUJ	0.0145	+/-0.0316	0.0628	0.200	pCi/g	1					
Manganese-54	UJ	0.0164	+/-0.0208	0.021	0.100	pCi/g	1					
Radium-226		0.236	+/-0.0617	0.0398	1.00	pCi/g	1					
Sodium-22	UUJ	-0.00505	+/-0.0122	0.0217	0.700	pCi/g	1					
Vanadium-48	UUJ	0.00356	+/-0.0161	0.031	1.00	pCi/g	1					
Zinc-65	UUJ	-0.0086	+/-0.0287	0.0447	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		2.50	+/-0.765	0.936	1.00	pCi/g	1	JDM	03/23/00	2155	17491	2
Beta		5.96	+/-1.20	1.76	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	-0.0201	+/-1.36	3.49	7.50	pCi/g	1	AAK	03/29/00	1754	18120	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	EPA 900
3	EPA 905.0

Notes:
The Qualifiers in this report are defined as follows :

Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-008000316-36
Sample ID: 23265002

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

*
** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

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Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-00900316-36
Sample ID: 23265003
Matrix: Soil
Collect Date: 16-MAR-00 14:05
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gamma Spec												
Gammaspec; Gamma, solid												
Americium-241	UUJ	-0.022	+/-0.0598	0.106	4.00	pCi/g	1	SRB	03/22/00	1721	17475	1
Beryllium-7	UUJ	0.0686	+/-0.0953	0.190	1.00	pCi/g	1					
Cesium-134	UUJ	0.00606	+/-0.0128	0.022	0.100	pCi/g	1					
Cesium-137		0.0609	+/-0.0295	0.0231	2.30	pCi/g	1					
Cobalt-57	UUJ	0.00716	+/-0.00753	0.0151	0.100	pCi/g	1					
Cobalt-60	UUJ	-0.000141	+/-0.0134	0.0253	0.100	pCi/g	1					
Europium-152	UUJ	-0.0124	+/-0.0356	0.0621	4.80	pCi/g	1					
Europium-154	UJ	0.0323	+/-0.0613	0.064	17.0	pCi/g	1					
Europium-155	UUJ	0.0327	+/-0.0416	0.0665	0.200	pCi/g	1					
Manganese-54	UUJ	0.00924	+/-0.0124	0.0213	0.100	pCi/g	1					
Radium-226		0.256	+/-0.0661	0.0436	1.00	pCi/g	1					
Sodium-22	UUJ	0.0115	+/-0.0218	0.0274	0.700	pCi/g	1					
Vanadium-48	UUJ	0.000694	+/-0.0151	0.0292	1.00	pCi/g	1					
Zinc-65	UUJ	0.00511	+/-0.0302	0.0511	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		5.57	+/-1.15	1.32	1.00	pCi/g	1	JDM	03/23/00	2155	17491	2
Beta		6.07	+/-1.30	1.94	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	0.866	+/-1.55	3.57	7.50	pCi/g	1	AAK	03/29/00	1754	18120	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	EPA 900
3	EPA 905.0

Notes:
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Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 0 00900316-36
Sample ID: 23265003

Proiect: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

*
** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

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Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-010000316-36
Sample ID: 23265004
Matrix: Soil
Collect Date: 16-MAR-00 14:10
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gamma Spec												
Gammaspec, Gamma, solid												
Americium-241	UUJ	0.0128	+/-0.080	0.139	4.00	pCi/g	1	SRB	03/22/00	1721	17475	1
Beryllium-7	UUJ	0.128	+/-0.224	0.427	1.00	pCi/g	1					
Cesium-134	UUJ	-0.0123	+/-0.0269	0.0405	0.100	pCi/g	1					
Cesium-137		2.02	+/-0.266	0.0495	2.30	pCi/g	1					
Cobalt-57	UUJ	0.0115	+/-0.0168	0.0323	0.100	pCi/g	1					
Cobalt-60		0.115	+/-0.0435	0.047	0.100	pCi/g	1					
Europium-152	UUJ	-0.0246	+/-0.0671	0.124	4.80	pCi/g	1					
Europium-154	UUJ	0.0155	+/-0.0423	0.0895	17.0	pCi/g	1					
Europium-155	UUJ	-0.0399	+/-0.0684	0.127	0.200	pCi/g	1					
Manganese-54	UJ	0.0307	+/-0.0222	0.0375	0.100	pCi/g	1					
Radium-226		0.123	+/-0.0661	0.0726	1.00	pCi/g	1					
Sodium-22	UUJ	0.00566	+/-0.0151	0.032	0.700	pCi/g	1					
Vanadium-48	UUJ	-0.0151	+/-0.0313	0.0472	1.00	pCi/g	1					
Zinc-65	UUJ	0.0191	+/-0.0436	0.0867	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		3.18	+/-0.792	0.786	1.00	pCi/g	1	JDM	03/24/00	0522	17491	2
Beta		3.83	+/-1.24	1.93	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	-1.12	+/-1.34	3.84	7.50	pCi/g	1	AAK	03/29/00	1754	18120	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	EPA 900
3	EPA 905.0

Notes:
The Qualifiers in this report are defined as follows :

Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-010000316-36
Sample ID: 23265004

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

*
** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

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Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-011000316-36
Sample ID: 23265005
Matrix: Soil
Collect Date: 16-MAR-00 14:15
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gamma Spec												
Gammaspec, Gamma, solid												
Americium-241	UUJ	0.0297	+/-0.0721	0.103	4.00	pCi/g	1	SRB	03/22/00	1722	17475	1
Beryllium-7	UUJ	-0.0312	+/-0.109	0.195	1.00	pCi/g	1					
Cesium-134	UUJ	-0.00207	+/-0.0211	0.0232	0.100	pCi/g	1					
Cesium-137		0.0551	+/-0.0286	0.0287	2.30	pCi/g	1					
Cobalt-57	UUJ	0.00278	+/-0.00938	0.0175	0.100	pCi/g	1					
Cobalt-60	UUJ	-0.0237	+/-0.0179	0.0265	0.100	pCi/g	1					
Europium-152	UUJ	-0.00504	+/-0.035	0.0646	4.80	pCi/g	1					
Europium-154	UUJ	0.0382	+/-0.0542	0.104	17.0	pCi/g	1					
Europium-155	UUJ	0.0259	+/-0.0382	0.073	0.200	pCi/g	1					
Manganese-54	UUJ	0.00352	+/-0.0145	0.0274	0.100	pCi/g	1					
Radium-226		0.324	+/-0.0714	0.0514	1.00	pCi/g	1					
Sodium-22	UUJ	0.0135	+/-0.0193	0.0369	0.700	pCi/g	1					
Vanadium-48	UUJ	0.00313	+/-0.0182	0.0343	1.00	pCi/g	1					
Zinc-65	UUJ	0.00558	+/-0.0406	0.0648	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		5.89	+/-0.939	0.540	1.00	pCi/g	1	JDM	03/24/00	0522	17491	2
Beta		5.73	+/-1.17	1.71	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	0.548	+/-1.62	3.89	7.50	pCi/g	1	AAK	03/29/00	1754	18120	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	EPA 900
3	EPA 905.0

Notes:
The Qualifiers in this report are defined as follows :

Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-011000316-36
Sample ID: 23265005

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

*
** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

The above sample is reported on an "as received" basis.

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Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-012000316-36
Sample ID: 23265006
Matrix: Soil
Collect Date: 16-MAR-00 14:17
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gamma Spec												
Gammaspec, Gamma, solid												
Americium-241	UUJ	-0.0269	+/-0.0986	0.144	4.00	pCi/g	1	SRB	03/22/00	1722	17475	1
Beryllium-7	UUJ	0.0347	+/-0.0978	0.180	1.00	pCi/g	1					
Cesium-134	UUJ	-0.00507	+/-0.0122	0.0221	0.100	pCi/g	1					
Cesium-137		0.035	+/-0.0261	0.023	2.30	pCi/g	1					
Cobalt-57	UUJ	0.00241	+/-0.00755	0.015	0.100	pCi/g	1					
Cobalt-60	UUJ	-0.00342	+/-0.012	0.0222	0.100	pCi/g	1					
Europium-152	UUJ	0.00961	+/-0.0345	0.064	4.80	pCi/g	1					
Europium-154	UUJ	0.0111	+/-0.0431	0.0744	17.0	pCi/g	1					
Europium-155	UJ	0.0361	+/-0.0688	0.065	0.200	pCi/g	1					
Manganese-54	UUJ	0.00736	+/-0.0127	0.0222	0.100	pCi/g	1					
Radium-226		0.212	+/-0.059	0.0462	1.00	pCi/g	1					
Sodium-22	UUJ	0.00397	+/-0.0154	0.0265	0.700	pCi/g	1					
Vanadium-48	UUJ	0.00408	+/-0.0148	0.0283	1.00	pCi/g	1					
Zinc-65	UUJ	-0.0142	+/-0.0279	0.0472	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		1.96	+/-0.835	1.19	1.00	pCi/g	1	JDM	03/24/00	0522	17491	2
Beta		4.73	+/-1.17	1.78	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	0.211	+/-1.32	3.28	7.50	pCi/g	1	AAK	03/29/00	1754	18120	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	EPA 900
3	EPA 905.0

Notes:
The Qualifiers in this report are defined as follows :

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Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-012000316-36
Sample ID: 23265006

Proiect: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

*
** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.
UJ-Q Not quantified due to low abundance.

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Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-014000316-36
Sample ID: 23265028
Matrix: Soil
Collect Date: 16-MAR-00 14:37
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec												
Alphaspec Pu, solid												
Plutonium-238	UUJ	-0.000295	+/-0.0362	0.091	6.60	pCi/g	1	JAL	03/28/00	2021	17680	1
Plutonium-239/240	UUJ	-7.370E-05	+/-0.0181	0.0566	4.00	pCi/g	1					
Alphaspec Th, solid												
Thorium-228		0.529	+/-0.172	0.171	1.00	pCi/g	1	JAL	03/29/00	2215	17678	2
Thorium-230		0.239	+/-0.106	0.117	1.00	pCi/g	1					
Thorium-232		0.338	+/-0.118	0.0755	1.00	pCi/g	1					
Alphaspec U, solid												
Uranium-233/234	UJ	0.114	+/-0.0961	0.140	0.900	pCi/g	1	JAL	03/28/00	1527	17677	3
Uranium-235/236	UUJ	-0.0181	+/-0.0384	0.153	0.900	pCi/g	1					
Uranium-238		0.268	+/-0.136	0.108	0.900	pCi/g	1					
Rad Gamma Spec												
Gamma I129, solid												
Iodine-129	U	-0.0181	+/-0.155	0.210	1.00	pCi/g	1	SRB	03/24/00	0636	17256	4
Gammaspec, Gamma, solid												
Americium-241	UUJ	-0.00204	+/-0.0476	0.0859	4.00	pCi/g	1	SRB	03/22/00	1312	17475	5
Beryllium-7	UUJ	-0.0789	+/-0.112	0.199	1.00	pCi/g	1					
Cesium-134	UUJ	-0.003	+/-0.0135	0.0213	0.100	pCi/g	1					
Cesium-137		1.07	+/-0.136	0.024	2.30	pCi/g	1					
Cobalt-57	UUJ	-0.00419	+/-0.00842	0.0157	0.100	pCi/g	1					
Cobalt-60	UUJ	-0.0132	+/-0.012	0.0187	0.100	pCi/g	1					
Europium-152	UUJ	0.0102	+/-0.0381	0.0688	4.80	pCi/g	1					
Europium-154	UUJ	-0.0383	+/-0.0421	0.0692	17.0	pCi/g	1					
Europium-155	UUJ	-0.0121	+/-0.0335	0.0637	0.200	pCi/g	1					
Manganese-54	UUJ	0.00359	+/-0.012	0.0226	0.100	pCi/g	1					
Radium-226		0.158	+/-0.061	0.044	1.00	pCi/g	1					
Sodium-22	UUJ	-0.0136	+/-0.015	0.0247	0.700	pCi/g	1					
Vanadium-48	UUJ	-0.0062	+/-0.0155	0.0284	1.00	pCi/g	1					
Zinc-65	UUJ	-0.0388	+/-0.0286	0.0448	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		1.46	+/-0.752	1.12	1.00	pCi/g	1	JDM	03/24/00	0522	17491	6
Beta		6.04	+/-1.22	1.79	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	0.263	+/-1.99	4.93	7.50	pCi/g	1	AAK	03/29/00	1754	18120	7
Rad Liquid Scint												
Liquid Scint C14, solid												

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-014000316-36
Sample ID: 23265028

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scint												
Liquid Scint C14, solid												
Carbon-14	U	-0.0754	+/-0.122	0.216	1.00	pCi/g	1	AEA	04/07/00	0225	19597	8
Liquid Scint Ni63, solid												
Nickel-63	UUJ	0.0207	+/-0.653	1.58	2.00	pCi/g	1	AEA	03/27/00	2216	17871	9
Liquid Scint Tc99, solid												
Technetium-99	U	0.117	+/-0.213	0.492	5.00	pCi/g	1	PD	04/11/00	0731	19596	10

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	DOE EML HASL 300
3	DOE EML HASL 300
4	LANL EM-9
5	DOE EML HASL 300
6	EPA 900
7	EPA 905.0
8	EPA 504.1
9	DOE RESL Ni-1
10	DOE EML HASL 300

Notes:
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- DL Failed required detection limit.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- RI Not quantified due to interference.
- U Indicates the compound was analyzed for but not detected above the detection limit
- U Sample result < .5*MDA and MDA <= RDL.
- UJ .5*MDA < Sample result < MDA and MDA <= RDL.

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
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Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-014000316-36
Sample ID: 23265028

oject: BRKL002°
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

UJ-Q Not quantified due to low abundance.

The above sample is reported on an "as received" basis.

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Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-017000316-36
Sample ID: 23265029
Matrix: Soil
Collect Date: 16-MAR-00 14:42
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec												
Alphaspec Pu, solid												
Plutonium-238	UUJ	-0.025	+/-0.0559	0.134	6.60	pCi/g	1	JAL	03/28/00	2025	17680	1
Plutonium-239/240	UUJ	0.0119	+/-0.0225	0.046	4.00	pCi/g	1					
Alphaspec Th, solid												
Thorium-228		0.551	+/-0.137	0.0493	1.00	pCi/g	1	JAL	03/29/00	2343	17678	2
Thorium-230		0.323	+/-0.0961	0.0167	1.00	pCi/g	1					
Thorium-232		0.446	+/-0.118	0.0167	1.00	pCi/g	1					
Alphaspec U, solid												
Uranium-233/234		0.274	+/-0.125	0.0896	0.900	pCi/g	1	JAL	03/28/00	1519	17677	3
Uranium-235/236	UUJ	0.0393	+/-0.0534	0.0977	0.900	pCi/g	1					
Uranium-238		0.290	+/-0.128	0.0802	0.900	pCi/g	1					
Rad Gamma Spec												
Gamma I129, solid												
Iodine-129	UJ	0.141	+/-0.149	0.200	1.00	pCi/g	1	SRB	03/24/00	0725	17256	4
Gammaspec, Gamma, solid												
Americium-241		0.135	+/-0.097	0.0869	4.00	pCi/g	1	SRB	03/22/00	1723	17475	5
Beryllium-7	UUJ	0.0141	+/-0.104	0.197	1.00	pCi/g	1					
Cesium-134	UUJ	4.320E-05	+/-0.0145	0.0233	0.100	pCi/g	1					
Cesium-137		0.330	+/-0.0549	0.026	2.30	pCi/g	1					
Cobalt-57	UUJ	-0.00387	+/-0.00838	0.0157	0.100	pCi/g	1					
Cobalt-60	UUJ	-0.002	+/-0.0139	0.0256	0.100	pCi/g	1					
Europium-152	UUJ	0.0301	+/-0.0376	0.0703	4.80	pCi/g	1					
Europium-154	UUJ	-0.0374	+/-0.0388	0.0631	17.0	pCi/g	1					
Europium-155	UJ	0.040	+/-0.0518	0.0624	0.200	pCi/g	1					
Manganese-54	UUJ	0.0087	+/-0.0124	0.0241	0.100	pCi/g	1					
Radium-226		0.255	+/-0.0711	0.0488	1.00	pCi/g	1					
Sodium-22	UUJ	-0.0134	+/-0.0138	0.0225	0.700	pCi/g	1					
Vanadium-48	UUJ	0.0122	+/-0.0148	0.0307	1.00	pCi/g	1					
Zinc-65	UUJ	-0.0503	+/-0.0345	0.0545	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		4.92	+/-0.964	0.823	1.00	pCi/g	1	JDM	03/24/00	0522	17491	6
Beta		6.01	+/-1.23	1.80	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	-0.135	+/-1.86	4.78	7.50	pCi/g	1	AAK	03/29/00	1811	18120	7
Rad Liquid Scint												
Liquid Scint C14, solid												

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-017000316-36
Sample ID: 23265029

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scint												
Liquid Scint C14, solid												
Carbon-14	U	-0.0053	+/-0.129	0.224	1.00	pCi/g	1	AEA	04/07/00	0257	19597	8
Liquid Scint Ni63, solid												
Nickel-63	UUJ	-0.249	+/-0.777	1.88	2.00	pCi/g	1	AEA	03/27/00	2319	17871	9
Liquid Scint Tc99, solid												
Technetium-99	U	0.208	+/-0.249	0.558	5.00	pCi/g	1	PD	04/11/00	0803	19596	10

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	DOE EML HASL 300
3	DOE EML HASL 300
4	LANL EM-9
5	DOE EML HASL 300
6	EPA 900
7	EPA 905.0
8	EPA 504.1
9	DOE RESL Ni-1
10	DOE EML HASL 300

Notes:
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U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.

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Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-017000316-36
Sample ID: 23265029

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

UJ-Q Not quantified due to low abundance.

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Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-018000316-36
Sample ID: 23265030
Matrix:
Collect Date:
Receive Date:
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec												
Alphaspec Pu, solid												
Plutonium-238	UUJ	-0.0205	+/-0.0229	0.0731	6.60	pCi/g	1	JAL	03/28/00	2038	17680	1
Plutonium-239/240	UUJ	0.00501	+/-0.016	0.0388	4.00	pCi/g	1					
Alphaspec Th, solid												
Thorium-228		0.263	+/-0.102	0.126	1.00	pCi/g	1	JAL	03/29/00	2343	17678	2
Thorium-230		0.143	+/-0.0605	0.0454	1.00	pCi/g	1					
Thorium-232		0.166	+/-0.0637	0.0156	1.00	pCi/g	1					
Alphaspec U, solid												
Uranium-233/234		0.278	+/-0.115	0.0735	0.900	pCi/g	1	JAL	03/28/00	1519	17677	3
Uranium-235/236	UUJ	0.00806	+/-0.0218	0.056	0.900	pCi/g	1					
Uranium-238		0.101	+/-0.0683	0.0658	0.900	pCi/g	1					
Rad Gamma Spec												
Gamma I129, solid												
Iodine-129	U	-0.0185	+/-0.133	0.180	1.00	pCi/g	1	SRB	03/24/00	0842	17256	4
Gammaspec, Gamma, solid												
Americium-241	UUJ	0.0247	+/-0.0796	0.120	4.00	pCi/g	1	SRB	03/22/00	1909	17475	5
Beryllium-7	UUJ	-0.00853	+/-0.089	0.168	1.00	pCi/g	1					
Cesium-134	UUJ	-0.0137	+/-0.0122	0.0205	0.100	pCi/g	1					
Cesium-137		0.0251	+/-0.0232	0.0233	2.30	pCi/g	1					
Cobalt-57	UUJ	0.0045	+/-0.00697	0.0138	0.100	pCi/g	1					
Cobalt-60	UUJ	0.00288	+/-0.012	0.0238	0.100	pCi/g	1					
Europium-152	UUJ	0.00455	+/-0.0309	0.0565	4.80	pCi/g	1					
Europium-154	UUJ	-0.00616	+/-0.0359	0.0669	17.0	pCi/g	1					
Europium-155	UUJ	0.00091	+/-0.0297	0.058	0.200	pCi/g	1					
Manganese-54	UUJ	0.00718	+/-0.0113	0.022	0.100	pCi/g	1					
Radium-226		0.203	+/-0.061	0.0446	1.00	pCi/g	1					
Sodium-22	UUJ	-0.00212	+/-0.0128	0.0239	0.700	pCi/g	1					
Vanadium-48	UUJ	0.00201	+/-0.0131	0.0248	1.00	pCi/g	1					
Zinc-65	UUJ	-0.021	+/-0.0291	0.0474	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		1.85	+/-0.739	0.967	1.00	pCi/g	1	JDM	03/24/00	0522	17491	6
Beta	UJ	1.50	+/-1.23	2.04	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	0.540	+/-1.80	4.31	7.50	pCi/g	1	AAK	03/29/00	1811	18120	7
Rad Liquid Scint												
Liquid Scint C14, solid												

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-018000316-36
Sample ID: 23265030

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	
Rad Liquid Scint												
Liquid Scint C14, solid												
Carbon-14	U	-0.0053	+/-0.128	0.222	1.00	pCi/g	1	AEA	04/07/00	0329	19597	8
Liquid Scint Ni63, solid												
Nickel-63	UUJ	0.376	+/-0.802	1.94	2.00	pCi/g	1	AEA	03/28/00	0021	17871	9
Liquid Scint Tc99, solid												
Technetium-99	UJ	0.394	+/-0.254	0.529	5.00	pCi/g	1	PD	04/11/00	0836	19596	10

The following Prep Methods were performed

Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	03/22/00	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	03/21/00	

Method	Description
1	DOE EML HASL 300
2	DOE EML HASL 300
3	DOE EML HASL 300
4	LANL EM-9
5	DOE EML HASL 300
6	EPA 900
7	EPA 905.0
8	EPA 504.1
9	DOE RESL Ni-1
10	DOE EML HASL 300

Notes:
The Qualifiers in this report are defined as follows :

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**	Indicates the analyte is a surrogate compound.
DL	Failed required detection limit.
J	Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI	Not quantified due to interference.
U	Indicates the compound was analyzed for but not detected above the detection limit
U	Sample result < .5*MDA and MDA <= RDL.
UJ	.5*MDA < Sample result < MDA and MDA <= RDL.

Certificate of Analysis

Company : Brookhaven National Laboratory
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Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-018000316-36
Sample ID: 23265030

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

UJ-Q Not quantified due to low abundance.

The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-019000316-36
Sample ID: 23265031
Matrix: Soil
Collect Date: 16-MAR-00 15:07
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec												
Alphaspec Pu, solid												
Plutonium-238	UUJ	0.0161	+/-0.0433	0.0919	6.60	pCi/g	1	JAL	03/28/00	2038	17680	1
Plutonium-239/240	UUJ	0.00313	+/-0.0272	0.0684	4.00	pCi/g	1					
Alphaspec Th, solid												
Thorium-228		0.151	+/-0.0725	0.0755	1.00	pCi/g	1	JAL	03/29/00	2343	17678	2
Thorium-230		0.139	+/-0.0629	0.019	1.00	pCi/g	1					
Thorium-232		0.0697	+/-0.0433	0.019	1.00	pCi/g	1					
Alphaspec U, solid												
Uranium-233/234	UJ	0.0744	+/-0.064	0.0822	0.900	pCi/g	1	JAL	03/28/00	1519	17677	3
Uranium-235/236	UUJ	0.0209	+/-0.0342	0.0627	0.900	pCi/g	1					
Uranium-238	UUJ	0.0388	+/-0.0486	0.0822	0.900	pCi/g	1					
Rad Gamma Spec												
Gamma I129, solid												
Iodine-129	U	-0.0701	+/-0.137	0.175	1.00	pCi/g	1	SRB	03/24/00	0950	17256	4
Gammaspec, Gamma, solid												
Americium-241	UUJ	-0.000634	+/-0.0199	0.0348	4.00	pCi/g	1	SRB	03/22/00	1911	17475	5
Beryllium-7	UUJ	-0.018	+/-0.108	0.199	1.00	pCi/g	1					
Cesium-134	UUJ	-0.00639	+/-0.0152	0.0231	0.100	pCi/g	1					
Cesium-137		0.163	+/-0.0386	0.0216	2.30	pCi/g	1					
Cobalt-57	UUJ	0.0039	+/-0.00784	0.0151	0.100	pCi/g	1					
Cobalt-60	UUJ	0.00545	+/-0.0148	0.0288	0.100	pCi/g	1					
Europium-152	UUJ	-0.0132	+/-0.0387	0.0626	4.80	pCi/g	1					
Europium-154	UUJ	-0.00284	+/-0.0435	0.0803	17.0	pCi/g	1					
Europium-155	UUJ	-0.00803	+/-0.0305	0.0571	0.200	pCi/g	1					
Manganese-54	UUJ	-0.00819	+/-0.0142	0.0254	0.100	pCi/g	1					
Radium-226		0.0824	+/-0.0526	0.0536	1.00	pCi/g	1					
Sodium-22	UUJ	-0.00105	+/-0.0155	0.0286	0.700	pCi/g	1					
Vanadium-48	UUJ	-0.00923	+/-0.018	0.0322	1.00	pCi/g	1					
Zinc-65	UUJ	-0.0341	+/-0.0344	0.0462	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		2.51	+/-0.754	0.857	1.00	pCi/g	1	JDM	03/24/00	0522	17491	6
Beta		9.37	+/-1.44	2.04	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	0.278	+/-1.36	3.34	7.50	pCi/g	1	AAK	03/29/00	1811	18120	7
Rad Liquid Scint												
Liquid Scint C14, solid												

Certificate of Analysis

Company : Brookhaven National Laboratory
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Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-019000316-36
Sample ID: 23265031

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scint												
Liquid Scint C14, solid												
Carbon-14	U	0.0858	+/-0.128	0.216	1.00	pCi/g	1	AEA	04/07/00	0401	19597	8
Liquid Scint Ni63, solid												
Nickel-63	UUJ	0.169	+/-0.767	1.86	2.00	pCi/g	1	AEA	03/28/00	0124	17871	9
Liquid Scint Tc99, solid												
Technetium-99	UJ	0.239	+/-0.211	0.458	5.00	pCi/g	1	PD	04/11/00	0908	19596	10

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	DOE EML HASL 300
3	DOE EML HASL 300
4	LANL EM-9
5	DOE EML HASL 300
6	EPA 900
7	EPA 905.0
8	EPA 504.1
9	DOE RESL Ni-1
10	DOE EML HASL 300

Notes:
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DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
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U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.

Certificate of Analysis

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Report Date: April 18, 2000

Client Sample ID: 065-019000316-36
Sample ID: 23265031

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

UJ-Q Not quantified due to low abundance.

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Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-020000316-36
Sample ID: 23265032
Matrix: Soil
Collect Date: 16-MAR-00 15:17
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec												
Alphaspec Pu, solid												
Plutonium-238	UUJ	0.00818	+/-0.0164	0.0245	6.60	pCi/g	1	JAL	03/28/00	2333	17680	1
Plutonium-239/240	UUJ	0.00809	+/-0.0259	0.0627	4.00	pCi/g	1					
Alphaspec Th, solid												
Thorium-228		0.385	+/-0.120	0.111	1.00	pCi/g	1	JAL	03/29/00	2343	17678	2
Thorium-230		0.215	+/-0.0833	0.0781	1.00	pCi/g	1					
Thorium-232		0.223	+/-0.0831	0.0682	1.00	pCi/g	1					
Alphaspec U, solid												
Uranium-233/234		0.161	+/-0.0912	0.074	0.900	pCi/g	1	JAL	03/28/00	1519	17677	3
Uranium-235/236	UJ	0.0329	+/-0.0419	0.063	0.900	pCi/g	1					
Uranium-238		0.187	+/-0.0976	0.0628	0.900	pCi/g	1					
Rad Gamma Spec												
Gamma I129, solid												
Iodine-129		0.201	+/-0.278	0.171	1.00	pCi/g	1	SRB	03/24/00	1141	17256	4
Gammaspec, Gamma, solid												
Americium-241	UUJ	0.0126	+/-0.0998	0.170	4.00	pCi/g	1	SRB	03/22/00	1313	17475	5
Beryllium-7	UUJ	0.0178	+/-0.110	0.197	1.00	pCi/g	1					
Cesium-134	UUJ	-0.0168	+/-0.013	0.0217	0.100	pCi/g	1					
Cesium-137		0.0725	+/-0.0288	0.0232	2.30	pCi/g	1					
Cobalt-57	UUJ	0.00454	+/-0.00815	0.0162	0.100	pCi/g	1					
Cobalt-60	UUJ	0.00146	+/-0.0131	0.0254	0.100	pCi/g	1					
Europium-152	UUJ	-0.0133	+/-0.0352	0.0619	4.80	pCi/g	1					
Europium-154	UUJ	0.0275	+/-0.0394	0.0802	17.0	pCi/g	1					
Europium-155	UJ	0.0484	+/-0.0365	0.0747	0.200	pCi/g	1					
Manganese-54	UUJ	-0.00494	+/-0.0133	0.0234	0.100	pCi/g	1					
Radium-226		0.275	+/-0.0653	0.0476	1.00	pCi/g	1					
Sodium-22	UUJ	0.00972	+/-0.014	0.0286	0.700	pCi/g	1					
Vanadium-48	UUJ	0.0131	+/-0.0177	0.0317	1.00	pCi/g	1					
Zinc-65	UUJ	0.000525	+/-0.0301	0.0478	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		10.2	+/-1.28	0.901	1.00	pCi/g	1	JDM	03/24/00	0522	17491	6
Beta		16.7	+/-1.39	1.61	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	0.225	+/-0.937	2.30	7.50	pCi/g	1	AAK	03/29/00	1811	18120	7
Rad Liquid Scint												
Liquid Scint C14, solid												

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-020000316-36
Sample ID: 23265032

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scint												
Liquid Scint C14, solid												
Carbon-14	U	-0.0249	+/-0.127	0.223	1.00	pCi/g	1	AEA	04/07/00	0433	19597	8
Liquid Scint Ni63, solid												
Nickel-63	UUJ	0.390	+/-0.540	1.31	2.00	pCi/g	1	AEA	03/28/00	0226	17871	9
Liquid Scint Tc99, solid												
Technetium-99	UJ	0.264	+/-0.225	0.487	5.00	pCi/g	1	PD	04/11/00	0940	19596	10

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	DOE EML HASL 300
3	DOE EML HASL 300
4	LANL EM-9
5	DOE EML HASL 300
6	EPA 900
7	EPA 905.0
8	EPA 504.1
9	DOE RESL Ni-1
10	DOE EML HASL 300

Notes:
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- RI Not quantified due to interference.
- U Indicates the compound was analyzed for but not detected above the detection limit
- U Sample result < .5*MDA and MDA <= RDL.
- UJ .5*MDA < Sample result < MDA and MDA <= RDL.

Certificate of Analysis

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Report Date: April 18, 2000

Client Sample ID: 065-020000316-36
Sample ID: 23265032

Project: BRKL00297
Client ID: BP
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

UJ-Q Not quantified due to low abundance.

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Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-021000316-36
Sample ID: 23265033
Matrix: Soil
Collect Date: 16-MAR-00 15:30
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec												
Alphaspec Pu, solid												
Plutonium-238	UUJ	0.00	+/-0.00	0.0256	6.60	pCi/g	1	JAL	03/28/00	2333	17680	1
Plutonium-239/240	UUJ	0.00854	+/-0.0171	0.0256	4.00	pCi/g	1					
Alphaspec Th, solid												
Thorium-228		0.473	+/-0.130	0.074	1.00	pCi/g	1	JAL	03/29/00	2343	17678	2
Thorium-230		0.257	+/-0.0869	0.0372	1.00	pCi/g	1					
Thorium-232		0.263	+/-0.088	0.0372	1.00	pCi/g	1					
Alphaspec U, solid												
Uranium-233/234		0.222	+/-0.112	0.0891	0.900	pCi/g	1	JAL	03/28/00	1519	17677	3
Uranium-235/236	UUJ	0.0134	+/-0.0385	0.0972	0.900	pCi/g	1					
Uranium-238		0.173	+/-0.0984	0.0798	0.900	pCi/g	1					
Rad Gamma Spec												
Gamma I129, solid												
Iodine-129	U	-0.108	+/-0.123	0.173	1.00	pCi/g	1	SRB	03/27/00	1024	17256	4
Gammaspec, Gamma, solid												
Americium-241	UUJ	-0.012	+/-0.0658	0.110	4.00	pCi/g	1	SRB	03/22/00	2316	17475	5
Beryllium-7	UUJ	-0.0303	+/-0.0979	0.148	1.00	pCi/g	1					
Cesium-134	UUJ	-0.0116	+/-0.011	0.0188	0.100	pCi/g	1					
Cesium-137		0.0829	+/-0.0246	0.0207	2.30	pCi/g	1					
Cobalt-57	UUJ	0.00319	+/-0.00743	0.0146	0.100	pCi/g	1					
Cobalt-60	UUJ	0.00819	+/-0.0131	0.0261	0.100	pCi/g	1					
Europium-152	UUJ	-0.00852	+/-0.0312	0.0552	4.80	pCi/g	1					
Europium-154	UUJ	-0.0164	+/-0.0331	0.0589	17.0	pCi/g	1					
Europium-155	UJ	0.0413	+/-0.0313	0.0638	0.200	pCi/g	1					
Manganese-54	UUJ	0.00379	+/-0.0111	0.0209	0.100	pCi/g	1					
Radium-226		0.271	+/-0.0601	0.0389	1.00	pCi/g	1					
Sodium-22	UUJ	-0.00587	+/-0.0118	0.021	0.700	pCi/g	1					
Vanadium-48	UUJ	-0.0144	+/-0.0144	0.0228	1.00	pCi/g	1					
Zinc-65	UUJ	-0.0143	+/-0.030	0.043	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		5.86	+/-1.08	0.853	1.00	pCi/g	1	JDM	03/24/00	0651	17491	6
Beta		8.03	+/-1.32	1.88	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	1.02	+/-1.41	3.13	7.50	pCi/g	1	AAK	03/29/00	1811	18120	7
Rad Liquid Scint												
Liquid Scint C14, solid												

Certificate of Analysis

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Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-021000316-36
Sample ID: 23265033

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scint												
Liquid Scint C14, solid												
Carbon-14	U	-0.0486	+/-0.122	0.214	1.00	pCi/g	1	AEA	04/07/00	0505	19597	8
Liquid Scint Ni63, solid												
Nickel-63	UUJ	-0.0382	+/-0.722	1.75	2.00	pCi/g	1	AEA	03/28/00	0329	17871	9
Liquid Scint Tc99, solid												
Technetium-99	U	0.235	+/-0.235	0.518	5.00	pCi/g	1	PD	04/11/00	1012	19596	10

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	DOE EML HASL 300
3	DOE EML HASL 300
4	LANL EM-9
5	DOE EML HASL 300
6	EPA 900
7	EPA 905.0
8	EPA 504.1
9	DOE RESL Ni-1
10	DOE EML HASL 300

Notes:
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DL Failed required detection limit.
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RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.

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Sample ID: 23265033

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

UJ-Q Not quantified due to low abundance.

The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : Brookhaven National Laboratory
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Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-022000316-36
Sample ID: 23265034
Matrix: Soil
Collect Date: 16-MAR-00 15:40
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec												
Alphaspec Pu, solid												
Plutonium-238	UUJ	0.00	+/-0.00	0.0256	6.60	pCi/g	1	JAL	03/28/00	2333	17680	1
Plutonium-239/240	UUJ	0.00	+/-0.00	0.0255	4.00	pCi/g	1					
Alphaspec Th, solid												
Thorium-228		0.344	+/-0.123	0.129	1.00	pCi/g	1	JAL	03/29/00	2343	17678	2
Thorium-230		0.199	+/-0.0794	0.0424	1.00	pCi/g	1					
Thorium-232		0.283	+/-0.0963	0.0202	1.00	pCi/g	1					
Alphaspec U, solid												
Uranium-233/234		0.218	+/-0.121	0.106	0.900	pCi/g	1	JAL	03/28/00	1519	17677	3
Uranium-235/236	UUJ	0.000612	+/-0.0339	0.116	0.900	pCi/g	1					
Uranium-238		0.233	+/-0.126	0.106	0.900	pCi/g	1					
Rad Gamma Spec												
Gamma I129, solid												
Iodine-129	U	-0.0529	+/-0.175	0.227	1.00	pCi/g	1	SRB	03/27/00	1140	17256	4
Gammaspec, Gamma, solid												
Americium-241	UUJ	0.00601	+/-0.0992	0.181	4.00	pCi/g	1	SRB	03/22/00	2317	17475	5
Beryllium-7	UUJ	-0.0398	+/-0.114	0.195	1.00	pCi/g	1					
Cesium-134	UUJ	-0.0018	+/-0.0129	0.0209	0.100	pCi/g	1					
Cesium-137		0.0502	+/-0.0333	0.0263	2.30	pCi/g	1					
Cobalt-57	UUJ	-0.00202	+/-0.00877	0.0167	0.100	pCi/g	1					
Cobalt-60	UJ	0.0164	+/-0.0276	0.0271	0.100	pCi/g	1					
Europium-152	UUJ	-0.00278	+/-0.0399	0.0712	4.80	pCi/g	1					
Europium-154	UUJ	-0.0066	+/-0.0411	0.0764	17.0	pCi/g	1					
Europium-155	UJ	0.0683	+/-0.071	0.0791	0.200	pCi/g	1					
Manganese-54	UUJ	0.00474	+/-0.014	0.0263	0.100	pCi/g	1					
Radium-226		0.342	+/-0.070	0.0463	1.00	pCi/g	1					
Sodium-22	UUJ	-0.00231	+/-0.0147	0.0273	0.700	pCi/g	1					
Vanadium-48	UJ	0.0243	+/-0.0165	0.0347	1.00	pCi/g	1					
Zinc-65	UUJ	-0.000459	+/-0.0363	0.0565	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		7.31	+/-1.16	0.723	1.00	pCi/g	1	JDM	03/24/00	0651	17491	6
Beta		8.21	+/-1.59	2.45	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	1.30	+/-1.75	3.91	7.50	pCi/g	1	AAK	03/29/00	1811	18120	7
Rad Liquid Scint												
Liquid Scint C14, solid												

Certificate of Analysis

Company : Brookhaven National Laboratory
Address : OER
Building 51M
Upton, NY 11973-5000
Contact: Ms. Anna Bou
Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-022000316-ɔ
Sample ID: 23265034

Project: ɓRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scint												
Liquid Scint C14, solid												
Carbon-14	U	0.0075	+/-0.127	0.220	1.00	pCi/g	1	AEA	04/07/00	0537	19597	8
Liquid Scint Ni63, solid												
Nickel-63	U	0.532	+/-0.857	2.08	2.00	pCi/g	1	AEA	03/28/00	0431	17871	9
Liquid Scint Tc99, solid												
Technetium-99	U	-0.0385	+/-0.174	0.438	5.00	pCi/g	1	PD	04/11/00	1044	19596	10

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	DOE EML HASL 300
3	DOE EML HASL 300
4	LANL EM-9
5	DOE EML HASL 300
6	EPA 900
7	EPA 905.0
8	EPA 504.1
9	DOE RESL Ni-1
10	DOE EML HASL 300

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
DL Failed required detection limit.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
RI Not quantified due to interference.
U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.

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Report Date: April 18, 2000

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Sample ID: 23265034

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

UJ-Q Not quantified due to low abundance.

The above sample is reported on an "as received" basis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by

Certificate of Analysis

Company : Brookhaven National Laboratory
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Upton, NY 11973-5000
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Project: Routine Analytical

Report Date: April 18, 2000

Client Sample ID: 065-023000316-36
Sample ID: 23265035
Matrix: Soil
Collect Date: 16-MAR-00 15:50
Receive Date: 18-MAR-00 12:00
Collector: Client

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec												
Alphaspec Pu, solid												
Plutonium-238	UUJ	0.151	+/-0.180	0.334	6.60	pCi/g	1	JAL	03/29/00	1733	17680	1
Plutonium-239/240	UUJ	0.0288	+/-0.0663	0.151	4.00	pCi/g	1					
Alphaspec Th, solid												
Thorium-228		0.308	+/-0.109	0.115	1.00	pCi/g	1	JAL	03/29/00	2223	17678	2
Thorium-230		0.217	+/-0.0795	0.0506	1.00	pCi/g	1					
Thorium-232		0.237	+/-0.0854	0.0643	1.00	pCi/g	1					
Alphaspec U, solid												
Uranium-233/234		0.277	+/-0.133	0.0998	0.900	pCi/g	1	JAL	03/28/00	1531	17677	3
Uranium-235/236	UUJ	0.0363	+/-0.0511	0.0897	0.900	pCi/g	1					
Uranium-238		0.158	+/-0.0971	0.0431	0.900	pCi/g	1					
Rad Gamma Spec												
Gamma I129, solid												
Iodine-129	U	-0.12	+/-0.155	0.186	1.00	pCi/g	1	SRB	03/27/00	1401	17256	4
Gammaspec, Gamma, solid												
Americium-241	UUJ	0.0121	+/-0.112	0.186	4.00	pCi/g	1	SRB	03/22/00	2318	17475	5
Beryllium-7	UUJ	0.0988	+/-0.220	0.405	1.00	pCi/g	1					
Cesium-134	UUJ	-0.019	+/-0.0297	0.0429	0.100	pCi/g	1					
Cesium-137		0.0668	+/-0.0372	0.0477	2.30	pCi/g	1					
Cobalt-57	UUJ	0.0055	+/-0.0191	0.0353	0.100	pCi/g	1					
Cobalt-60	UJ	0.0303	+/-0.0281	0.0586	0.100	pCi/g	1					
Europium-152	UUJ	0.0195	+/-0.0746	0.123	4.80	pCi/g	1					
Europium-154	UUJ	0.0585	+/-0.0919	0.162	17.0	pCi/g	1					
Europium-155	UUJ	0.0125	+/-0.0817	0.152	0.200	pCi/g	1					
Manganese-54	UUJ	-0.000423	+/-0.028	0.050	0.100	pCi/g	1					
Radium-226		0.360	+/-0.108	0.0966	1.00	pCi/g	1					
Sodium-22	UUJ	0.0208	+/-0.0327	0.0576	0.700	pCi/g	1					
Vanadium-48	UUJ	0.00879	+/-0.0308	0.0599	1.00	pCi/g	1					
Zinc-65	UUJ	-0.0241	+/-0.0706	0.106	0.200	pCi/g	1					
Rad Gas Flow												
GFPC, Gross A/B, solid												
Alpha		2.72	+/-0.916	1.19	1.00	pCi/g	1	JDM	03/24/00	0651	17491	6
Beta		6.08	+/-1.33	2.02	1.00	pCi/g	1					
GFPC, Sr90, solid												
Strontium-90	UUJ	1.50	+/-2.56	5.88	7.50	pCi/g	1	AAK	03/29/00	1811	18120	7
Rad Liquid Scint												
Liquid Scint C14, solid												

Certificate of Analysis

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Sample ID: 23265035

Project: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result		DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scint												
Liquid Scint C14, solid												
Carbon-14	U	-0.0279	+/-0.127	0.222	1.00	pCi/g	1	AEA	04/07/00	0609	19597	8
Liquid Scint Ni63, solid												
Nickel-63	UUJ	-0.894	+/-0.738	1.79	2.00	pCi/g	1	AEA	03/28/00	0534	17871	9
Liquid Scint Tc99, solid												
Technetium-99	UJ	0.354	+/-0.260	0.551	5.00	pCi/g	1	PD	04/11/00	1116	19596	10

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep EPI A-021,A-021B,A-026	CRS	03/22/00	1521	17470
Dry Soil Prep	Dry Soil Prep EPI A-021,A-021B,A-026	CRS	03/21/00	1251	17210

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300
2	DOE EML HASL 300
3	DOE EML HASL 300
4	LANL EM-9
5	DOE EML HASL 300
6	EPA 900
7	EPA 905.0
8	EPA 504.1
9	DOE RESL Ni-1
10	DOE EML HASL 300

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J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
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U Indicates the compound was analyzed for but not detected above the detection limit
U Sample result < .5*MDA and MDA <= RDL.
UJ .5*MDA < Sample result < MDA and MDA <= RDL.

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Proiect: BRKL00297
Client ID: BRKL001
COC: 6521

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

UJ-Q Not quantified due to low abundance.

The above sample is reported on an "as received" basis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Nancy Slater at 843-556-8171 Ext. 4438 .

Reviewed by