

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

Chevron c/o Earthfax Eng.
Suite 100
7324 South Union Park
Midvale UT 84047

September 12, 2011

Project: Red Butte Release

Submittal Date: 08/25/2011

Group Number: 1263516

SDG: SLC41

PO Number: 1288-10

State of Sample Origin: UT

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
Mill Cr Below 700 East Grab Water Sample	6387524
TB-1 Water Sample	6387525
Mill Cr Below 700 East-Bed Composite Soil Sample	6387526
Mill Cr Below 700 East-Bank Composite Soil Sample	6387527
City Cr Near Cyn Entrance Gate Grab Water Sample	6387528
City Cr Near Cyn Ent Gate-Bed Composite Soil	6387529
City Cr Near Cyn Ent Gate-Bank Composite Soil	6387530
TB-2 Water Sample	6387531

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

1 COPY TO Earthfax Engineering
1 COPY TO Data Package Group

Attn: Galen Williams

Questions? Contact your Client Services Representative
Elizabeth A Leonhardt at (510) 232-8894

Respectfully Submitted,



Chad A. Moline
Group Leader



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: Mill Cr Below 700 East Grab Water Sample
Red Butte

LLI Sample # WW 6387524
LLI Group # 1263516
Account # 12118

Project Name: Red Butte Release

Collected: 08/24/2011 07:45 by RBW

Chevron c/o Earthfax Eng.
Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park
Midvale UT 84047

Reported: 09/12/2011 10:21

MCBE- SDG#: SLC41-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	
	purge				
02898	Benzene	71-43-2	N.D.	0.1	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	1
02898	Toluene	108-88-3	N.D.	0.1	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	1
GC/MS	Semivolatiles	SW-846 8270D SIM	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.0098	1
08357	Acenaphthylene	208-96-8	N.D.	0.0098	1
08357	Anthracene	120-12-7	N.D.	0.0098	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0098	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0098	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0098	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.0098	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0098	1
08357	Chrysene	218-01-9	N.D.	0.0098	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0098	1
08357	Fluoranthene	206-44-0	N.D.	0.0098	1
08357	Fluorene	86-73-7	N.D.	0.0098	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0098	1
08357	Naphthalene	91-20-3	N.D.	0.029	1
08357	Phenanthrene	85-01-8	N.D.	0.029	1
08357	Pyrene	129-00-0	N.D.	0.0098	1
GC Petroleum	SW-846 8015B modified	mg/l	mg/l		
Hydrocarbons					
05260	Coal Tar Oil	8001-58-9	N.D.	0.20	1
05260	Diesel/#2 Fuel	68334-30-5	N.D.	0.20	1
05260	#6 Fuel Oil	68553-00-4	N.D.	1.0	1
05260	Gasoline	8006-61-9	N.D.	0.20	1
05260	Kerosene	8008-20-6	N.D.	0.20	1
05260	Mineral Spirits	8030-30-6	N.D.	0.20	1
05260	Motor Oil	n.a.	N.D.	1.0	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	VOCs 25 ml purge 8260	SW-846 8260B 25mL purge	1	C112421AA	08/30/2011 14:37	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C112421AA	08/30/2011 14:37	Jason M Long	1

**Sample Description: Mill Cr Below 700 East Grab Water Sample
Red Butte**

**LLI Sample # WW 6387524
LLI Group # 1263516
Account # 12118**

Project Name: Red Butte Release

Collected: 08/24/2011 07:45 by RBW

Chevron c/o Earthfax Eng.
Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park

Reported: 09/12/2011 10:21

Midvale UT 84047

MCBE- SDG#: SLC41-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270D SIM	1	11241WAL026	09/02/2011 05:20	Gregory J Drahovsky	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	11241WAL026	08/30/2011 09:00	Catherine R Wiker	1
05260	TPH by GC-FID (Waters)	SW-846 8015B modified	1	112410010A	08/30/2011 17:35	Heather E Williams	1
11176	TPH by GC-FID Waters Ext.	SW-846 3510C	1	112410010A	08/29/2011 21:30	Elaine F Stoltzfus	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: TB-1 Water Sample
Red Butte

LLI Sample # WW 6387525
LLI Group # 1263516
Account # 12118

Project Name: Red Butte Release

Collected: 08/24/2011 07:45

Chevron c/o Earthfax Eng.

Submitted: 08/25/2011 09:00

Suite 100

Reported: 09/12/2011 10:21

7324 South Union Park

Midvale UT 84047

TB1-- SDG#: SLC41-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	
		purge			
02898	Benzene	71-43-2	N.D.	0.1	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	1
02898	Toluene	108-88-3	N.D.	0.1	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	VOCs 25 ml purge 8260	SW-846 8260B 25mL	1	C112421AA	08/30/2011 14:59	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C112421AA	08/30/2011 14:59	Jason M Long	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: Mill Cr Below 700 East-Bed Composite Soil Sample
Red Butte

LLI Sample # SW 6387526
LLI Group # 1263516
Account # 12118

Project Name: Red Butte Release

Collected: 08/24/2011 07:45 by RBW

Chevron c/o Earthfax Eng.
Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park
Midvale UT 84047

Reported: 09/12/2011 10:21

MCBEB SDG#: SLC41-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	mg/kg	mg/kg	
10950	Benzene	71-43-2	N.D.	0.0005	0.95
10950	Ethylbenzene	100-41-4	N.D.	0.0009	0.95
10950	Toluene	108-88-3	0.011	0.0009	0.95
10950	Xylene (Total)	1330-20-7	N.D.	0.0009	0.95
GC/MS	Semivolatiles	SW-846 8270D SIM	mg/kg	mg/kg	
02858	Acenaphthene	83-32-9	N.D.	0.012	5
02858	Acenaphthylene	208-96-8	N.D.	0.0059	5
02858	Anthracene	120-12-7	0.0059	0.0059	5
02858	Benzo(a)anthracene	56-55-3	0.037	0.012	5
02858	Benzo(a)pyrene	50-32-8	0.050	0.012	5
02858	Benzo(b)fluoranthene	205-99-2	0.083	0.012	5
02858	Benzo(g,h,i)perylene	191-24-2	0.031	0.012	5
02858	Benzo(k)fluoranthene	207-08-9	0.027	0.012	5
02858	Chrysene	218-01-9	0.057	0.0059	5
02858	Dibenz(a,h)anthracene	53-70-3	N.D.	0.012	5
02858	Fluoranthene	206-44-0	0.087	0.012	5
02858	Fluorene	86-73-7	N.D.	0.012	5
02858	Indeno(1,2,3-cd)pyrene	193-39-5	0.016	0.012	5
02858	Naphthalene	91-20-3	N.D.	0.012	5
02858	Phenanthrene	85-01-8	0.027	0.012	5
02858	Pyrene	129-00-0	0.072	0.012	5

Reporting limits were raised due to interference from the sample matrix.

Reporting limits were raised due to limited sample volume.

GC Petroleum	SW-846 8015B modified	mg/kg	mg/kg		
Hydrocarbons					
05256	Coal Tar Oil	8001-58-9	170	4.0	1
05256	Diesel/#2 Fuel	68334-30-5	N.D.	4.0	1
05256	#6 Fuel Oil	68553-00-4	N.D.	30	1
05256	Gasoline	8006-61-9	N.D.	4.0	1
05256	Kerosene	8008-20-6	N.D.	5.0	1
05256	Mineral Spirits	8030-30-6	N.D.	4.0	1
05256	Motor Oil	n.a.	N.D.	11	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

Wet Chemistry	SM20 2540 G	%	%		
00111	Moisture	n.a.	20.0	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Sample Description: Mill Cr Below 700 East-Bed Composite Soil Sample
Red Butte**

**LLI Sample # SW 6387526
LLI Group # 1263516
Account # 12118**

Project Name: Red Butte Release

Collected: 08/24/2011 07:45 by RBW

Chevron c/o Earthfax Eng.
Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park

Reported: 09/12/2011 10:21

Midvale UT 84047

MCBEB SDG#: SLC41-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution Factor
					Date	Time		
10950	BTEX 8260 Soil	SW-846 8260B	1	B112381AA	08/26/2011	19:58	Chelsea B Eastep	0.95
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201123725361	08/25/2011	23:06	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201123725361	08/25/2011	23:06	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201123725361	08/25/2011	22:48	Lois E Hiltz	n.a.
02858	PAHs in soils by SIM	SW-846 8270D SIM	1	11249SLB026	09/07/2011	20:55	Gregory J Drahovsky	5
10484	BNA Soil Extraction PAH SIM	SW-846 3550B	2	11249SLB026	09/06/2011	23:30	David V Hershey Jr	1
05256	TPH by GC-FID (Soils)	SW-846 8015B modified	1	112460005A	09/05/2011	21:32	Heather E Williams	1
04833	Extraction / Fuel TPH (Soils)	SW-846 3550B	1	112460005A	09/05/2011	07:20	Katheryne V Sponheimer	1
00111	Moisture	SM20 2540 G	1	11241820001A	08/29/2011	21:33	Scott W Freisher	1

**Sample Description: Mill Cr Below 700 East-Bank Composite Soil Sample
Red Butte**

**LLI Sample # SW 6387527
LLI Group # 1263516
Account # 12118**

Project Name: Red Butte Release

Collected: 08/24/2011 07:45 by RBW

Chevron c/o Earthfax Eng.
Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park

Reported: 09/12/2011 10:21

Midvale UT 84047

MCBEN SDG#: SLC41-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	
10950	Benzene	71-43-2	N.D.	0.0005	0.96
10950	Ethylbenzene	100-41-4	N.D.	0.001	0.96
10950	Toluene	108-88-3	0.023	0.001	0.96
10950	Xylene (Total)	1330-20-7	N.D.	0.001	0.96

The GC/MS volatile internal standard peak areas were outside the QC limits. A re-analysis was performed, and the matrix effect was confirmed.

GC/MS	Semivolatiles	SW-846 8270D SIM	mg/kg	mg/kg	
02858	Acenaphthene	83-32-9	N.D.	0.0033	5
02858	Acenaphthylene	208-96-8	N.D.	0.0017	5
02858	Anthracene	120-12-7	0.0054	0.0017	5
02858	Benzo(a)anthracene	56-55-3	0.020	0.0033	5
02858	Benzo(a)pyrene	50-32-8	0.029	0.0033	5
02858	Benzo(b)fluoranthene	205-99-2	0.050	0.0033	5
02858	Benzo(g,h,i)perylene	191-24-2	0.018	0.0033	5
02858	Benzo(k)fluoranthene	207-08-9	0.015	0.0033	5
02858	Chrysene	218-01-9	0.035	0.0017	5
02858	Dibenz(a,h)anthracene	53-70-3	0.0037	0.0033	5
02858	Fluoranthene	206-44-0	0.044	0.0033	5
02858	Fluorene	86-73-7	N.D.	0.0033	5
02858	Indeno(1,2,3-cd)pyrene	193-39-5	0.0091	0.0033	5
02858	Naphthalene	91-20-3	N.D.	0.0033	5
02858	Phenanthrene	85-01-8	0.015	0.0033	5
02858	Pyrene	129-00-0	0.042	0.0033	5

Reporting limits were raised due to interference from the sample matrix.

GC Petroleum	SW-846 8015B modified	mg/kg	mg/kg	
Hydrocarbons				
05256	Coal Tar Oil	8001-58-9	280	4.0 1
05256	Diesel/#2 Fuel	68334-30-5	N.D.	4.0 1
05256	#6 Fuel Oil	68553-00-4	N.D.	30 1
05256	Gasoline	8006-61-9	N.D.	4.0 1
05256	Kerosene	8008-20-6	N.D.	5.0 1
05256	Mineral Spirits	8030-30-6	N.D.	4.0 1
05256	Motor Oil	n.a.	N.D.	11 1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

Wet Chemistry	SM20 2540 G	%	%	
00111	Moisture	n.a.	32.5	0.50 1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: Mill Cr Below 700 East-Bank Composite Soil Sample
Red Butte

LLI Sample # SW 6387527
LLI Group # 1263516
Account # 12118

Project Name: Red Butte Release

Collected: 08/24/2011 07:45 by RBW

Chevron c/o Earthfax Eng.
Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park
Midvale UT 84047

Reported: 09/12/2011 10:21

MCBEN SDG#: SLC41-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10950	BTEX 8260 Soil	SW-846 8260B	1	B112381AA	08/26/2011 20:21	Chelsea B Eastep	0.96
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201123725361	08/25/2011 23:06	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201123725361	08/25/2011 23:06	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201123725361	08/25/2011 22:52	Lois E Hiltz	n.a.
02858	PAHs in soils by SIM	SW-846 8270D SIM	1	11249SLB026	09/07/2011 21:28	Gregory J Drahovsky	5
10484	BNA Soil Extraction PAH SIM	SW-846 3550B	2	11249SLB026	09/06/2011 23:30	David V Hershey Jr	1
05256	TPH by GC-FID (Soils)	SW-846 8015B modified	1	112460005A	09/06/2011 02:00	Heather E Williams	1
04833	Extraction / Fuel TPH (Soils)	SW-846 3550B	1	112460005A	09/05/2011 07:20	Katheryne V Sponheimer	1
00111	Moisture	SM20 2540 G	1	11241820001A	08/29/2011 21:33	Scott W Freisher	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

**Sample Description: City Cr Near Cyn Entrance Gate Grab Water Sample
Red Butte**

**LLI Sample # WW 6387528
LLI Group # 1263516
Account # 12118**

Project Name: Red Butte Release

Collected: 08/24/2011 15:10 by RBW

Chevron c/o Earthfax Eng.
Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park

Reported: 09/12/2011 10:21

Midvale UT 84047

CCCEG SDG#: SLC41-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	
	purge				
02898	Benzene	71-43-2	N.D.	0.1	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	1
02898	Toluene	108-88-3	N.D.	0.1	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	1
GC/MS	Semivolatiles	SW-846 8270D SIM	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.0095	1
08357	Acenaphthylene	208-96-8	N.D.	0.0095	1
08357	Anthracene	120-12-7	N.D.	0.0095	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0095	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0095	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0095	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.0095	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0095	1
08357	Chrysene	218-01-9	N.D.	0.0095	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0095	1
08357	Fluoranthene	206-44-0	N.D.	0.0095	1
08357	Fluorene	86-73-7	N.D.	0.0095	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0095	1
08357	Naphthalene	91-20-3	N.D.	0.029	1
08357	Phenanthrene	85-01-8	N.D.	0.029	1
08357	Pyrene	129-00-0	N.D.	0.0095	1
GC Petroleum	SW-846 8015B modified	mg/l	mg/l		
Hydrocarbons					
05260	Coal Tar Oil	8001-58-9	N.D.	0.20	1
05260	Diesel/#2 Fuel	68334-30-5	N.D.	0.20	1
05260	#6 Fuel Oil	68553-00-4	N.D.	1.0	1
05260	Gasoline	8006-61-9	N.D.	0.20	1
05260	Kerosene	8008-20-6	N.D.	0.20	1
05260	Mineral Spirits	8030-30-6	N.D.	0.20	1
05260	Motor Oil	n.a.	N.D.	1.0	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	VOCs 25 ml purge 8260	SW-846 8260B 25mL purge	1	C112421AA	08/30/2011 15:22	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C112421AA	08/30/2011 15:22	Jason M Long	1

**Sample Description: City Cr Near Cyn Entrance Gate Grab Water Sample
Red Butte**

**LLI Sample # WW 6387528
LLI Group # 1263516
Account # 12118**

Project Name: Red Butte Release

Collected: 08/24/2011 15:10 by RBW

Chevron c/o Earthfax Eng.
Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park

Reported: 09/12/2011 10:21

Midvale UT 84047

CCCEG SDG#: SLC41-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270D SIM	1	11241WAL026	09/02/2011 05:53	Gregory J Drahovsky	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	11241WAL026	08/30/2011 09:00	Catherine R Wiker	1
05260	TPH by GC-FID (Waters)	SW-846 8015B modified	1	112410010A	08/30/2011 18:20	Heather E Williams	1
11176	TPH by GC-FID Waters Ext.	SW-846 3510C	1	112410010A	08/29/2011 21:30	Elaine F Stoltzfus	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: City Cr Near Cyn Ent Gate-Bed Composite Soil
Red Butte

LLI Sample # SW 6387529
LLI Group # 1263516
Account # 12118

Project Name: Red Butte Release

Collected: 08/24/2011 15:10 by RBW

Chevron c/o Earthfax Eng.
Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park
Midvale UT 84047

Reported: 09/12/2011 10:21

CCCEB SDG#: SLC41-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	mg/kg	mg/kg	
10950	Benzene	71-43-2	N.D.	0.0005	0.92
10950	Ethylbenzene	100-41-4	N.D.	0.0009	0.92
10950	Toluene	108-88-3	N.D.	0.0009	0.92
10950	Xylene (Total)	1330-20-7	N.D.	0.0009	0.92
GC/MS	Semivolatiles	SW-846 8270D SIM	mg/kg	mg/kg	
02858	Acenaphthene	83-32-9	N.D.	0.00067	1
02858	Acenaphthylene	208-96-8	N.D.	0.00033	1
02858	Anthracene	120-12-7	0.00039	0.00033	1
02858	Benzo(a)anthracene	56-55-3	0.00083	0.00067	1
02858	Benzo(a)pyrene	50-32-8	0.0017	0.00067	1
02858	Benzo(b)fluoranthene	205-99-2	0.0016	0.00067	1
02858	Benzo(g,h,i)perylene	191-24-2	0.0015	0.00067	1
02858	Benzo(k)fluoranthene	207-08-9	0.0013	0.00067	1
02858	Chrysene	218-01-9	0.0011	0.00033	1
02858	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00067	1
02858	Fluoranthene	206-44-0	0.0016	0.00067	1
02858	Fluorene	86-73-7	N.D.	0.00067	1
02858	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00067	1
02858	Naphthalene	91-20-3	N.D.	0.00067	1
02858	Phenanthrene	85-01-8	0.0011	0.00067	1
02858	Pyrene	129-00-0	0.0020	0.00067	1
GC Petroleum	SW-846 8015B modified		mg/kg	mg/kg	
Hydrocarbons					
05256	Coal Tar Oil	8001-58-9	N.D.	4.0	1
05256	Diesel/#2 Fuel	68334-30-5	N.D.	4.0	1
05256	#6 Fuel Oil	68553-00-4	N.D.	30	1
05256	Gasoline	8006-61-9	N.D.	4.0	1
05256	Kerosene	8008-20-6	N.D.	5.0	1
05256	Mineral Spirits	8030-30-6	N.D.	4.0	1
05256	Motor Oil	n.a.	N.D.	11	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

Wet Chemistry		SM20 2540 G	%	%	
00111	Moisture	n.a.	17.9	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Sample Description: City Cr Near Cyn Ent Gate-Bed Composite Soil
Red Butte**

**LLI Sample # SW 6387529
LLI Group # 1263516
Account # 12118**

Project Name: Red Butte Release

Collected: 08/24/2011 15:10 by RBW

Chevron c/o Earthfax Eng.
Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park
Midvale UT 84047

Reported: 09/12/2011 10:21

CCCEB SDG#: SLC41-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution Factor
					Date	Time		
10950	BTEX 8260 Soil	SW-846 8260B	1	B112381AA	08/26/2011	20:43	Chelsea B Eastep	0.92
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201123725361	08/25/2011	23:07	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201123725361	08/25/2011	23:07	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201123725361	08/25/2011	22:56	Lois E Hiltz	n.a.
02858	PAHs in soils by SIM	SW-846 8270D SIM	1	11249SLB026	09/07/2011	22:01	Gregory J Drahovsky	1
10484	BNA Soil Extraction PAH SIM	SW-846 3550B	2	11249SLB026	09/06/2011	23:30	David V Hershey Jr	1
05256	TPH by GC-FID (Soils)	SW-846 8015B modified	1	112460005A	09/05/2011	19:18	Heather E Williams	1
04833	Extraction / Fuel TPH (Soils)	SW-846 3550B	1	112460005A	09/05/2011	07:20	Katheryne V Sponheimer	1
00111	Moisture	SM20 2540 G	1	11241820001A	08/29/2011	21:33	Scott W Freisher	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: City Cr Near Cyn Ent Gate-Bank Composite Soil
Red Butte

LLI Sample # SW 6387530
LLI Group # 1263516
Account # 12118

Project Name: Red Butte Release

Collected: 08/24/2011 15:10 by RBW

Chevron c/o Earthfax Eng.
Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park
Midvale UT 84047

Reported: 09/12/2011 10:21

CCCN SDG#: SLC41-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	mg/kg	mg/kg	
10950	Benzene	71-43-2	N.D.	0.0005	0.96
10950	Ethylbenzene	100-41-4	N.D.	0.001	0.96
10950	Toluene	108-88-3	N.D.	0.001	0.96
10950	Xylene (Total)	1330-20-7	N.D.	0.001	0.96
GC/MS	Semivolatiles	SW-846 8270D SIM	mg/kg	mg/kg	
02858	Acenaphthene	83-32-9	0.00099	0.00066	1
02858	Acenaphthylene	208-96-8	0.00039	0.00033	1
02858	Anthracene	120-12-7	0.0013	0.00033	1
02858	Benzo(a)anthracene	56-55-3	0.0038	0.00066	1
02858	Benzo(a)pyrene	50-32-8	0.0051	0.00066	1
02858	Benzo(b)fluoranthene	205-99-2	0.0062	0.00066	1
02858	Benzo(g,h,i)perylene	191-24-2	0.0030	0.00066	1
02858	Benzo(k)fluoranthene	207-08-9	0.0033	0.00066	1
02858	Chrysene	218-01-9	0.0045	0.00033	1
02858	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00066	1
02858	Fluoranthene	206-44-0	0.0080	0.00066	1
02858	Fluorene	86-73-7	N.D.	0.00066	1
02858	Indeno(1,2,3-cd)pyrene	193-39-5	0.0015	0.00066	1
02858	Naphthalene	91-20-3	N.D.	0.00066	1
02858	Phenanthrene	85-01-8	0.0038	0.00066	1
02858	Pyrene	129-00-0	0.0072	0.00066	1
GC Petroleum	SW-846 8015B modified		mg/kg	mg/kg	
Hydrocarbons					
05256	Coal Tar Oil	8001-58-9	N.D.	4.0	1
05256	Diesel/#2 Fuel	68334-30-5	N.D.	4.0	1
05256	#6 Fuel Oil	68553-00-4	N.D.	30	1
05256	Gasoline	8006-61-9	N.D.	4.0	1
05256	Kerosene	8008-20-6	N.D.	5.0	1
05256	Mineral Spirits	8030-30-6	N.D.	4.0	1
05256	Motor Oil	n.a.	N.D.	11	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

Wet Chemistry		SM20 2540 G	%	%	
00111	Moisture	n.a.	23.6	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Sample Description: City Cr Near Cyn Ent Gate-Bank Composite Soil
Red Butte**

**LLI Sample # SW 6387530
LLI Group # 1263516
Account # 12118**

Project Name: Red Butte Release

Collected: 08/24/2011 15:10 by RBW

Chevron c/o Earthfax Eng.

Suite 100

Submitted: 08/25/2011 09:00

7324 South Union Park

Reported: 09/12/2011 10:21

Midvale UT 84047

CCCN SDG#: SLC41-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution Factor
					Date	Time		
10950	BTEX 8260 Soil	SW-846 8260B	1	B112381AA	08/26/2011	21:06	Chelsea B Eastep	0.96
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201123725361	08/25/2011	23:07	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201123725361	08/25/2011	23:07	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201123725361	08/25/2011	23:00	Lois E Hiltz	n.a.
02858	PAHs in soils by SIM	SW-846 8270D SIM	1	11249SLB026	09/07/2011	22:34	Gregory J Drahovsky	1
10484	BNA Soil Extraction PAH SIM	SW-846 3550B	2	11249SLB026	09/06/2011	23:30	David V Hershey Jr	1
05256	TPH by GC-FID (Soils)	SW-846 8015B modified	1	112460005A	09/05/2011	20:03	Heather E Williams	1
04833	Extraction / Fuel TPH (Soils)	SW-846 3550B	1	112460005A	09/05/2011	07:20	Katheryne V Sponheimer	1
00111	Moisture	SM20 2540 G	1	11241820001A	08/29/2011	21:33	Scott W Freisher	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: TB-2 Water Sample
Red Butte

LLI Sample # WW 6387531
LLI Group # 1263516
Account # 12118

Project Name: Red Butte Release

Collected: 08/24/2011 15:10

Chevron c/o Earthfax Eng.

Submitted: 08/25/2011 09:00

Suite 100

Reported: 09/12/2011 10:21

7324 South Union Park

Midvale UT 84047

TB2-- SDG#: SLC41-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	
		purge			
02898	Benzene	71-43-2	N.D.	0.1	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	1
02898	Toluene	108-88-3	N.D.	0.1	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	VOCs 25 ml purge 8260	SW-846 8260B 25mL	1	C112421AA	08/30/2011 15:44	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C112421AA	08/30/2011 15:44	Jason M Long	1

Quality Control Summary

 Client Name: Chevron c/o Earthfax Eng.
 Reported: 09/12/11 at 10:21 AM

Group Number: 1263516

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: B112381AA	Sample number(s): 6387526-6387527, 6387529-6387530							
Benzene	N.D.	0.0005	mg/kg	101		80-120		
Ethylbenzene	N.D.	0.001	mg/kg	99		80-120		
Toluene	N.D.	0.001	mg/kg	99		80-120		
Xylene (Total)	N.D.	0.001	mg/kg	99		80-120		
Batch number: C112421AA	Sample number(s): 6387524-6387525, 6387528, 6387531							
Benzene	N.D.	0.1	ug/l	100	99	80-120	1	30
Ethylbenzene	N.D.	0.1	ug/l	100	99	80-120	1	30
Toluene	N.D.	0.1	ug/l	99	98	80-120	1	30
Xylene (Total)	N.D.	0.1	ug/l	102	101	80-120	0	30
Batch number: 11241WAL026	Sample number(s): 6387524, 6387528							
Acenaphthene	N.D.	0.010	ug/l	94	91	74-109	2	30
Acenaphthylene	N.D.	0.010	ug/l	97	95	70-110	2	30
Anthracene	N.D.	0.010	ug/l	99	97	66-111	3	30
Benzo(a)anthracene	N.D.	0.010	ug/l	96	94	72-114	2	30
Benzo(a)pyrene	N.D.	0.010	ug/l	117	115	60-127	1	30
Benzo(b)fluoranthene	N.D.	0.010	ug/l	121	119	58-151	2	30
Benzo(g,h,i)perylene	N.D.	0.010	ug/l	101	100	57-131	0	30
Benzo(k)fluoranthene	N.D.	0.010	ug/l	121	119	59-130	1	30
Chrysene	N.D.	0.010	ug/l	95	93	76-116	2	30
Dibenz(a,h)anthracene	N.D.	0.010	ug/l	101	100	55-134	1	30
Fluoranthene	N.D.	0.010	ug/l	101	100	75-116	1	30
Fluorene	N.D.	0.010	ug/l	98	96	75-114	2	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	ug/l	102	101	53-158	1	30
Naphthalene	N.D.	0.030	ug/l	91	89	72-109	2	30
Phenanthrene	N.D.	0.030	ug/l	95	92	76-111	3	30
Pyrene	N.D.	0.010	ug/l	96	96	69-118	0	30
Batch number: 11249SLB026	Sample number(s): 6387526-6387527, 6387529-6387530							
Acenaphthene	N.D.	0.00067	mg/kg	85	71	63-120	19	30
Acenaphthylene	N.D.	0.00033	mg/kg	85	71	60-120	18	30
Anthracene	N.D.	0.00033	mg/kg	92	78	73-113	17	30
Benzo(a)anthracene	N.D.	0.00067	mg/kg	93	77	74-120	19	30
Benzo(a)pyrene	N.D.	0.00067	mg/kg	114	96	58-129	17	30
Benzo(b)fluoranthene	N.D.	0.00067	mg/kg	122	103	63-143	17	30
Benzo(g,h,i)perylene	N.D.	0.00067	mg/kg	106	88	66-150	18	30
Benzo(k)fluoranthene	N.D.	0.00067	mg/kg	114	94	54-142	19	30
Chrysene	N.D.	0.00033	mg/kg	92	77	73-114	17	30
Dibenz(a,h)anthracene	N.D.	0.00067	mg/kg	108	90	53-138	18	30
Fluoranthene	N.D.	0.00067	mg/kg	97	81	64-120	18	30
Fluorene	N.D.	0.00067	mg/kg	90	75	71-120	19	30
Indeno(1,2,3-cd)pyrene	N.D.	0.00067	mg/kg	108	90	56-134	18	30
Naphthalene	N.D.	0.00067	mg/kg	81	67	67-120	19	30
Phenanthrene	N.D.	0.00067	mg/kg	90	75	75-120	18	30

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

 Client Name: Chevron c/o Earthfax Eng.
 Reported: 09/12/11 at 10:21 AM

Group Number: 1263516

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Pyrene	N.D.	0.00067	mg/kg	90	75	72-119	18	30
Batch number: 112410010A	Sample number(s): 6387524, 6387528							
Coal Tar Oil	N.D.	0.20	mg/l					
Diesel/#2 Fuel	N.D.	0.20	mg/l	85	87	60-120	3	20
#6 Fuel Oil	N.D.	1.0	mg/l					
Gasoline	N.D.	0.20	mg/l					
Kerosene	N.D.	0.20	mg/l					
Mineral Spirits	N.D.	0.20	mg/l					
Motor Oil	N.D.	1.0	mg/l					
Batch number: 112460005A	Sample number(s): 6387526-6387527, 6387529-6387530							
Coal Tar Oil	N.D.	4.0	mg/kg					
Diesel/#2 Fuel	N.D.	4.0	mg/kg	87		64-122		
#6 Fuel Oil	N.D.	30.	mg/kg					
Gasoline	N.D.	4.0	mg/kg					
Kerosene	N.D.	5.0	mg/kg					
Mineral Spirits	N.D.	4.0	mg/kg					
Motor Oil	N.D.	11.	mg/kg					
Batch number: 11241820001A	Sample number(s): 6387526-6387527, 6387529-6387530							
Moisture				100		99-101		

Sample Matrix Quality Control

 Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: B112381AA	Sample number(s): 6387526-6387527, 6387529-6387530 UNSPK: P387071								
Benzene	103	100	55-143	3	30				
Ethylbenzene	100	90	44-141	12	30				
Toluene	100	93	50-146	8	30				
Xylene (Total)	98	89	44-136	11	30				
Batch number: 112460005A	Sample number(s): 6387526-6387527, 6387529-6387530 UNSPK: MCBEB BKG: MCBEB								
Coal Tar Oil						170	270	47*	20
Diesel/#2 Fuel	190*		37-129			N.D.	N.D.	0	20
#6 Fuel Oil						N.D.	N.D.	0 (1)	20
Gasoline						N.D.	N.D.	0 (1)	20
Kerosene						N.D.	N.D.	0 (1)	20
Mineral Spirits						N.D.	N.D.	0 (1)	20
Motor Oil						N.D.	N.D.	0 (1)	20
Batch number: 11241820001A	Sample number(s): 6387526-6387527, 6387529-6387530 BKG: P385496								
Moisture					23.0	23.0	0		15

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

 Client Name: Chevron c/o Earthfax Eng.
 Reported: 09/12/11 at 10:21 AM

Group Number: 1263516

Surrogate Quality Control

Analysis Name: VOCs by 8260B - Solid

Batch number: B112381AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6387526	104	95	103	88
6387527	104	96	110	77
6387529	104	99	102	92
6387530	104	96	107	81
Blank	104	104	96	92
LCS	102	99	101	103
MS	101	95	102	99
MSD	101	97	100	100

Limits: 71-114 70-109 70-123 70-111

Analysis Name: VOCs 25 ml purge 8260

Batch number: C112421AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6387524	105	107	95	90
6387525	103	103	95	91
6387528	104	106	94	90
6387531	104	106	95	90
Blank	99	104	98	91
LCS	97	101	101	103
LCSD	96	98	101	98

Limits: 77-114 74-113 77-110 78-110

Analysis Name: PAHs in waters by SIM

Batch number: 11241WAL026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6387524	109	106	114
6387528	104	103	110
Blank	120	115	128
LCS	105	100	107
LCSD	102	100	107

Limits: 64-147 68-132 53-129

Analysis Name: PAHs in soils by SIM

Batch number: 11249SLB026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6387526	94	87	94
6387527	92	80	88
6387529	102	90	98
6387530	104	93	100
Blank	91	89	101
LCS	98	90	100
LCSD	80	75	84

Limits: 67-129 63-129 51-141

Analysis Name: TPH by GC-FID (Waters)

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron c/o Earthfax Eng.
Reported: 09/12/11 at 10:21 AM

Group Number: 1263516

Surrogate Quality Control

Batch number: 112410010A

	Chlorobenzene	Orthoterphenyl
6387524	71	90
6387528	70	88
Blank	71	90
LCS	81	89
LCSD	77	89

Limits: 28-152 52-131

Analysis Name: TPH by GC-FID (Soils)

Batch number: 112460005A

	Chlorobenzene	Orthoterphenyl
6387526	56	73
6387527	52	81
6387529	58	89
6387530	55	74
Blank	58	95
DUP	59	93
LCS	70	96
MS	67	87

Limits: 49-125 59-129

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Chevron Generic Analysis Request/Chain of Custody



017805

Acct. #: 12118

For Lancaster Laboratories use only

Sample #: 6387524-31

SCR#:

Grp# 1263516

Facility #: _____ Site Address: _____ Chevron PM: _____ Lead Consultant: <u>EarthFax</u> Consultant/Office: <u>EarthFax Engineering</u> Consultant Prj. Mgr.: <u>Galen Williams</u> Consultant Phone #: <u>801-561-1555</u> Fax #: <u>801-561-1861</u> Sampler: <u>RB White & TA Jimenez</u> Service Order #: _____ <input type="checkbox"/> Non SAR: _____			Matrix Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Water <input type="checkbox"/> Air <input type="checkbox"/> Soil <input type="checkbox"/> Oil <input type="checkbox"/>		Analyses Requested Preservation Codes BTEX + MTBE <input type="checkbox"/> 8021 <input type="checkbox"/> 8260 <input type="checkbox"/> Naphth <input type="checkbox"/> TOC <input type="checkbox"/> Grain size <input type="checkbox"/> Total Solids <input type="checkbox"/> Moisture <input type="checkbox"/> Lead Total <input type="checkbox"/> Diss. <input type="checkbox"/> Method _____ VPH/EPH _____ NWT/PH H CID <input type="checkbox"/> quantification _____ TPH-D20 (801SD GC/FID) <input type="checkbox"/> TPH-OR20 (extended range) <input type="checkbox"/> BTEX (8260C GC/MS) <input type="checkbox"/> PAHs (8270D GC/MS/SIM) <input type="checkbox"/>										Preservative Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds 8021 MTBE Confirmation <input type="checkbox"/> Confirm MTBE + Naphthalene <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run ___ oxy's on highest hit <input type="checkbox"/> Run ___ oxy's on all hits													
Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	BTEX + MTBE	8021	8260	Naphth	TOC	Grain size	Total Solids	Moisture	Lead Total	Diss.	Method	VPH/EPH	NWT/PH H CID	quantification	TPH-D20 (801SD GC/FID)	TPH-OR20 (extended range)	BTEX (8260C GC/MS)	PAHs (8270D GC/MS/SIM)	Comments / Remarks
<u>Mud Cr below 700 East</u>	<u>8/24/11</u>	<u>07:45</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>7</u>	<input checked="" type="checkbox"/>													<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>TB-1</u>	<u>8/24/11</u>	<u>07:45</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>1</u>														<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>Mud Cr below 700 East - Bed</u>	<u>8/24/11</u>	<u>07:45</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<u>4</u>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>Mud Cr below 700 East - Bank</u>	<u>8/24/11</u>	<u>07:45</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<u>4</u>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>City Cr Near Cym Entrance Gate</u>	<u>8/24/11</u>	<u>15:10</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>7</u>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>City Cr Near Cym Ent Gate - Bed</u>	<u>8/24/11</u>	<u>15:10</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<u>4</u>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>City Cr Near Cym Ent Gate - Bank</u>	<u>8/24/11</u>	<u>15:10</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<u>4</u>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>TB-2</u>	<u>8/24/11</u>	<u>15:10</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>1</u>														<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Turnaround Time Requested (TAT) (please circle) STD. TAT 72 hour 48 hour 24 hour 4 day 5 day	Relinquished by:	Date	Time	Received by:	Date	Time
	<u>JB</u>	<u>8/24/11</u>	<u>19:10</u>			
Data Package Options (please circle if required) QC Summary Type I - Full Type VI (Raw Data) Disk / EDD WIP (RWQCB) Standard Format Disk _____ Other.	Relinquished by:	Date	Time	Received by:	Date	Time
	Relinquished by Commercial Carrier:			Received by:	Date	Time
	UPS <input type="checkbox"/> <u>FedEx</u> <input type="checkbox"/> Other _____			<u>Burandy Burandy</u>	<u>8-25-11</u>	<u>900</u>
Temperature Upon Receipt <u>32-37</u> C°			Custody Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers	Inorganic Qualifiers
A TIC is a possible aldol-condensation product	B Value is $<$ CRDL, but \geq IDL
B Analyte was also detected in the blank	E Estimated due to interference
C Pesticide result confirmed by GC/MS	M Duplicate injection precision not met
D Compound quantitated on a diluted sample	N Spike sample not within control limits
E Concentration exceeds the calibration range of the instrument	S Method of standard additions (MSA) used for calculation
N Presumptive evidence of a compound (TICs only)	U Compound was not detected
P Concentration difference between primary and confirmation columns $>$ 25%	W Post digestion spike out of control limits
U Compound was not detected	* Duplicate analysis not within control limits
X,Y,Z Defined in case narrative	+ Correlation coefficient for MSA $<$ 0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.