R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

January 6, 2015

Dr. Tomáš Oberding
NMOCD District 1
1625 French Drive
Hobbs, New Mexico 88240
VIA EMAIL

RE: Warrior BRW State Com. #1H Temporary Pit, In-place Burial Notice
Unit D, Section 28, T23S, R35E, API #30-025-40220

Dr. Oberding:

On behalf of Yates Petroleum Corporation, R. T. Hicks Consultants is provides this notice to NMOCD with a copy to the State Land Office (certified, return receipt request) that closure operations at the above- referenced pit will begin on Thursday, January 8 2015. The closure process should require about two weeks, depending on the availability of machinery. The rig was released on October 27, 2014.

After hydraulic fracturing and flow-back were completed, 4-point composite samples were collected from the inner horseshoe cell, outer horseshoe cell, and from the clean soil of the berms (beneath the liner) of the pit on December 3, 2014 for laboratory analyses. The table below calculates the concentration for "3:1 stabilized" material to allow comparison with Table II the Pit Rule (Closure Criteria for Burial Trenches and Waste Left in Place in Temporary Pits). The formula use in the table below is:

$$3{:}1\ \text{Stabilized Solids} = \frac{(\text{Outer Composite}*0.66) + (0.34*\text{Inner Composite}) + (\text{Mixing Dirt}*3)}{4}$$

Well Name	Sample Name	Sample Type	Sample Date	Chloride 80,000	Benzene 10	BTEX 50	GRO+DRO 1000	TPH 418.1 2500	GRO+DRO+ DROext	GRO	DRO	MRO	T	E	X	Lab	Report
Warrior 1H Pit	Outer Composite		12/3/2014	22000	1.2	16.8	1080	2100	1080	170	910	0	5.6	2.7	7.3	Hall	2
Warrior 1H Pit	Inner Composite		12/3/2014	76000	0	0	0	0	0	0	0	0	0	0	0	Hall	2
Warrior 1H Pit	Mixing Dirt Comp.		12/3/2014	0	0	0	0	0	0	0	0	0	0	0	0	Hall	2
	3:1 Stabilized	CALCULATED		14355.00	0.10	1.39	89.10	173.25	89.10								

The inner composite and outer composite ratio in the formula approximates the solids volume generated during drilling. The solids placed in the outer shoe are derived from drilling the surface casing string and production string. The inner shoe contains solids from drilling intermediate casing string.

Laboratory analyses (attached) of the component samples and the calculation of stabilized cuttings "demonstrate that, after the waste is solidified or stabilized with soil or other non-waste material at a ratio of no more than 3:1 soil or other non-waste material to waste, the concentration of any contaminant in the stabilized waste is not higher than the parameters listed in Table II of 19.15.17.13 NMAC."

This letter is being transmitted to the surface owner via email (return receipt) Mail. A variance request regarding this action is attached to this letter.

I will follow up this notice with a phone call the day before closure begins.

Sincerely,
R.T. Hicks Consultants

Mike Stubblefield
Project Manager

Copy: Yates Petroleum Corporation
, Mr. Bill Angle
Limestone Livestock LLC.
76 Angle Road
Lovington, NM 88260
CERTIFIED MAIL – RETURN RECIEPT REQUEST

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 17, 2014

Mike Stubblefield

R.T. Hicks Consultants, LTD
901 Rio Grande Blvd. NW
Suite F-142
Albuquerque, NM 87104
TEL: (505) 266-5004
FAX (505) 266-0745

RE: Warrior BRW State Com. 1H OrderNo.: 1412356

Dear Mike Stubblefield:

Hall Environmental Analysis Laboratory received 3 sample(s) on 12/5/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1412356**
Date Reported: **12/17/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Outer Comp.
Project: Warrior BRW State Com. 1H
Collection Date: 12/3/2014 10:37:00 AM
Lab ID: 1412356-001 **Matrix:** SOIL **Received Date:** 12/5/2014 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	910	99		mg/Kg	10	12/10/2014 10:15:50 AM	16741
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	12/10/2014 10:15:50 AM	16741
Surr: DNOP	0	63.5-128	S	%REC	10	12/10/2014 10:15:50 AM	16741
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	170	25		mg/Kg	5	12/11/2014 10:51:11 PM	16720
Surr: BFB	173	80-120	S	%REC	5	12/11/2014 10:51:11 PM	16720
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	1.2	0.12		mg/Kg	5	12/11/2014 10:51:11 PM	16720
Toluene	5.6	0.25		mg/Kg	5	12/11/2014 10:51:11 PM	16720
Ethylbenzene	2.7	0.25		mg/Kg	5	12/11/2014 10:51:11 PM	16720
Xylenes, Total	7.3	0.50		mg/Kg	5	12/11/2014 10:51:11 PM	16720
Surr: 4-Bromofluorobenzene	124	80-120	S	%REC	5	12/11/2014 10:51:11 PM	16720
EPA METHOD 300.0: ANIONS						Analyst: **lgp**	
Chloride	22000	750		mg/Kg	500	12/10/2014 5:12:42 PM	16758
EPA METHOD 418.1: TPH						Analyst: **JME**	
Petroleum Hydrocarbons, TR	2100	200		mg/Kg	10	12/10/2014 12:00:00 PM	16737

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Inner Comp.
Project: Warrior BRW State Com. 1H
Collection Date: 12/3/2014 10:51:00 AM
Lab ID: 1412356-002 **Matrix:** SOIL **Received Date:** 12/5/2014 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/10/2014 10:45:39 AM	16741
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/10/2014 10:45:39 AM	16741
Surr: DNOP	122	63.5-128		%REC	1	12/10/2014 10:45:39 AM	16741
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/11/2014 11:18:30 PM	16720
Surr: BFB	110	80-120		%REC	1	12/11/2014 11:18:30 PM	16720
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	1	12/11/2014 11:18:30 PM	16720
Toluene	ND	0.050		mg/Kg	1	12/11/2014 11:18:30 PM	16720
Ethylbenzene	ND	0.050		mg/Kg	1	12/11/2014 11:18:30 PM	16720
Xylenes, Total	ND	0.099		mg/Kg	1	12/11/2014 11:18:30 PM	16720
Surr: 4-Bromofluorobenzene	125	80-120	S	%REC	1	12/11/2014 11:18:30 PM	16720
EPA METHOD 300.0: ANIONS						Analyst: **lgp**	
Chloride	76000	15000		mg/Kg	1E	12/15/2014 6:44:04 PM	16758
EPA METHOD 418.1: TPH						Analyst: **JME**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	12/10/2014 12:00:00 PM	16737

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Mixing soil
Project: Warrior BRW State Com. 1H
Collection Date: 12/3/2014 10:30:00 AM
Lab ID: 1412356-003
Matrix: SOIL
Received Date: 12/5/2014 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/10/2014 11:15:21 AM	16741
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/10/2014 11:15:21 AM	16741
Surr: DNOP	104	63.5-128		%REC	1	12/10/2014 11:15:21 AM	16741
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/10/2014 3:31:39 AM	16720
Surr: BFB	90.9	80-120		%REC	1	12/10/2014 3:31:39 AM	16720
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	1	12/10/2014 3:31:39 AM	16720
Toluene	ND	0.050		mg/Kg	1	12/10/2014 3:31:39 AM	16720
Ethylbenzene	ND	0.050		mg/Kg	1	12/10/2014 3:31:39 AM	16720
Xylenes, Total	ND	0.10		mg/Kg	1	12/10/2014 3:31:39 AM	16720
Surr: 4-Bromofluorobenzene	95.9	80-120		%REC	1	12/10/2014 3:31:39 AM	16720
EPA METHOD 300.0: ANIONS						Analyst: **lgp**	
Chloride	ND	30		mg/Kg	20	12/10/2014 5:49:55 PM	16758
EPA METHOD 418.1: TPH						Analyst: **JME**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	12/10/2014 12:00:00 PM	16737

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1412356**

17-Dec-14

Client: R.T. Hicks Consultants, LTD

Project: Warrior BRW State Com. 1H

Sample ID	**MB-16758**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**16758**	RunNo:	**23071**					
Prep Date:	**12/10/2014**	Analysis Date:	**12/10/2014**	SeqNo:	**681701**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-16758**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**16758**	RunNo:	**23071**					
Prep Date:	**12/10/2014**	Analysis Date:	**12/10/2014**	SeqNo:	**681702**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1412356**

17-Dec-14

Client: R.T. Hicks Consultants, LTD

Project: Warrior BRW State Com. 1H

Sample ID	**MB-16737**	SampType:	**MBLK**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**PBS**	Batch ID:	**16737**	RunNo:	**23041**					
Prep Date:	**12/9/2014**	Analysis Date:	**12/10/2014**	SeqNo:	**680758**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	**LCS-16737**	SampType:	**LCS**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS**	Batch ID:	**16737**	RunNo:	**23041**					
Prep Date:	**12/9/2014**	Analysis Date:	**12/10/2014**	SeqNo:	**680759**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	120	20	100.0	0	118	80	120			

Sample ID	**LCSD-16737**	SampType:	**LCSD**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS02**	Batch ID:	**16737**	RunNo:	**23041**					
Prep Date:	**12/9/2014**	Analysis Date:	**12/10/2014**	SeqNo:	**680769**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	120	20	100.0	0	115	80	120	2.55	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1412356**

17-Dec-14

Client: R.T. Hicks Consultants, LTD

Project: Warrior BRW State Com. 1H

Sample ID **MB-16741**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **16741**	RunNo: **23048**
Prep Date: **12/9/2014**	Analysis Date: **12/10/2014**	SeqNo: **681300** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	6.9		10.00		69.0	63.5	128			

Sample ID **LCS-16741**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **16741**	RunNo: **23048**
Prep Date: **12/9/2014**	Analysis Date: **12/10/2014**	SeqNo: **681301** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	113	68.6	130			
Surr: DNOP	4.8		5.000		95.9	63.5	128			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1412356**

17-Dec-14

Client: R.T. Hicks Consultants, LTD

Project: Warrior BRW State Com. 1H

Sample ID	**MB-16708**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**16708**	RunNo:	**23008**					
Prep Date:	**12/8/2014**	Analysis Date:	**12/9/2014**	SeqNo:	**680441**	Units:	**%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	880		1000		87.9	80	120			

Sample ID	**LCS-16708**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**16708**	RunNo:	**23008**					
Prep Date:	**12/8/2014**	Analysis Date:	**12/9/2014**	SeqNo:	**680442**	Units:	**%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	80	120			

Sample ID	**MB-16720**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**16720**	RunNo:	**23008**					
Prep Date:	**12/8/2014**	Analysis Date:	**12/9/2014**	SeqNo:	**680463**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		91.9	80	120			

Sample ID	**LCS-16720**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**16720**	RunNo:	**23008**					
Prep Date:	**12/8/2014**	Analysis Date:	**12/9/2014**	SeqNo:	**680464**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.1	65.8	139			
Surr: BFB	1000		1000		99.7	80	120			

Sample ID	**LCSD-16720**	SampType:	**LCSD**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS02**	Batch ID:	**16720**	RunNo:	**23008**					
Prep Date:	**12/8/2014**	Analysis Date:	**12/9/2014**	SeqNo:	**680465**	Units:	**%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000							0	0	

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- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1412356**

17-Dec-14

Client: R.T. Hicks Consultants, LTD

Project: Warrior BRW State Com. 1H

Sample ID **MB-16708**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **16708**	RunNo: **23008**
Prep Date: **12/8/2014**	Analysis Date: **12/9/2014**	SeqNo: **680477** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		93.3	80	120			

Sample ID **LCS-16708**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **16708**	RunNo: **23008**
Prep Date: **12/8/2014**	Analysis Date: **12/9/2014**	SeqNo: **680478** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID **MB-16720**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **16720**	RunNo: **23008**
Prep Date: **12/8/2014**	Analysis Date: **12/9/2014**	SeqNo: **680494** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		98.7	80	120			

Sample ID **LCS-16720**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **16720**	RunNo: **23008**
Prep Date: **12/8/2014**	Analysis Date: **12/9/2014**	SeqNo: **680495** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.050	1.000	0	87.9	80	120			
Toluene	0.85	0.050	1.000	0	85.2	80	120			
Ethylbenzene	0.90	0.050	1.000	0	89.8	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID **LCSD-16720**	SampType: **LCSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS02**	Batch ID: **16720**	RunNo: **23008**
Prep Date: **12/8/2014**	Analysis Date: **12/9/2014**	SeqNo: **680496** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.050	1.000	0	92.3	80	120	4.87	20	
Toluene	0.91	0.050	1.000	0	90.7	80	120	6.28	20	
Ethylbenzene	0.94	0.050	1.000	0	94.3	80	120	4.96	20	
Xylenes, Total	2.8	0.10	3.000	0	93.3	80	120	3.91	20	

Qualifiers:

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- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1412356**

17-Dec-14

Client: R.T. Hicks Consultants, LTD

Project: Warrior BRW State Com. 1H

Sample ID	**LCSD-16720**	SampType:	**LCSD**	TestCode:	**EPA Method 8021B: Volatiles**
Client ID:	**LCSS02**	Batch ID:	**16720**	RunNo:	**23008**
Prep Date:	**12/8/2014**	Analysis Date:	**12/9/2014**	SeqNo:	**680496** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120	0		

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RT HICKS | Work Order Number: 1412356 | RcptNo: 1

Received by/date: CS 12/05/14

Logged By: **Celina Sessa** 12/5/2014 1:00:00 PM Celina Sessa

Completed By: **Celina Sessa** 12/8/2014 11:16:44 AM Celina Sessa

Reviewed By: IO 12/08/2014

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Client		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Not Present			

Chain-of-Custody Record

Client: R. T. Hicks Consultants

Mailing Address: 901 Rio Grande Blvd NW
Albuquerque, NM 87104

Phone #: (505) 266-5004

email or Fax#: R@rthicksconsult.com

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Warrior BRW State Com. 1H

Project #:

Project Manager: Mike Stubblefield

Sampler: Mike Stubblefield

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.8°C

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www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1412356	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	100 grams
12/3/14	10:37A	soil	Outer Comp.	1 glass	ice	-001	✓		✓	✓				✓				✓
12/3/14	10:51A	soil	Inner Comp.	1 glass	ice	-002	✓		✓	✓				✓				✓
12/3/14	10:30A	soil	Mixing soil	1 glass	ice	-003	✓		✓	✓				✓				✓

Analysis Request

Date	Time	Relinquished by:	Received by:	Date	Time
12/4/14	1000	Mike Stubblefield	Randall Hall	12/4	1000
12/5/14	1000	Randall Hall	Celina Sanchez	12/05/14	1300

Remarks: Email results to mike@, R@rthicksconsult.com