R. T. HICKS CONSULTANTS, LTD.

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

July 22, 2014

Mr. Daniel Sanchez
NMOCD District 4
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Via E-Mail and Mail

RE: Frio #1, Read and Stevens, Closure Report

Dear Mr. Sanchez:

In keeping with the requirements of the approved C-144 closure plan for the temporary pit, this report includes the following information listed in Part 24 of the C-144 form.

Required Information	**Location in Submission**
Proof of closure Notice (to surface owner and Division	Attachment 1
Proof of Deed Notice (required for on-site closure	Attachment 2
Plot Plan (for on-site closures and temporary pits)	Attachment 3 (C-105 and Plate 1)
Confirmation Sampling Analytical Results	Attachment 4
Waste Material Sampling Analytical Results(required for on-site closure)	Attachment 5
Disposal Facility Name and Permit Number	Not Applicable
Soil Backfilling and Cover Installation	Attachment 6
Re-vegetation Application and Seeding Technique	Attachment 7
Updated C-144 Form	Attachment 8
Site Reclamation (Photo Documentation)	To follow later

On Site Closure Location:
Latitude: N 34.974466 Longitude: W -103.270118 WGS 84 (Google Earth)

We understand that OCD cannot formally release the site under the current Rule until we document re-vegetation. As mentioned above, please expect documentation of re-vegetation when it is established in accordance with subsection I of 19.15.17.13 NMAC.

Getting the deed notice proved more perplexing than anticipated and we elected to wait until that document was "in hand" before we submitted this final report.

Sincerely,
R.T. Hicks Consultants, Ltd.

David J. Hamilton

David Hamilton
Project Manager

Attachment 1

Track & Confirm

GET EMAIL UPDATES PRINT DETAILS

YOUR LABEL NUMBER	SERVICE	STATUS OF YOUR ITEM	DATE & TIME	LOCATION	FEATURES
70113500000055171022	First-Class Mail®	Delivered	July 18, 2012, 11:11 am	SAN JON, NM 88434	**Expected Delivery By:** July 19, 2012 Certified Mail™ Return Receipt
		Arrival at Unit	July 18, 2012, 7:49 am	SAN JON, NM 88434	
		Dispatched to Sort Facility	July 17, 2012, 5:27 pm	ALBUQUERQUE, NM 87107	
		Acceptance	July 17, 2012, 4:32 pm	ALBUQUERQUE, NM 87107	

Check on Another Item

What's your label (or receipt) number?

Find

SENDER: *COMPLETE THIS SECTION*

- **Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.**
- **Print your name and address on the reverse so that we can return the card to you.**
- **Attach this card to the back of the mailpiece, or on the front if space permits.**

1. Article Addressed to:

JAMES SLUTZ
1701 B QUAY RD 50
SAN JON, NM
88434

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Robin Slutz ☐ Agent ☐ Addressee

B. Received by (Printed Name) Robin Slutz
C. Date of Delivery 7-16-12

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number
(Transfer from service label) 7011 3500 0000 5517 1022

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

Attachment 2

STATE OF NEW MEXICO §
§
COUNTY OF QUAY §

This Notice is filed to provide information concerning certain environmental conditions and/or use limitations pursuant to the New Mexico Oil Conservation Division (NMOCD) Rule found in Title 19 of the New Mexico Administrative Code (NMAC), Chapter 15, and affects the real property (the Property) described as follows:

Unit K of Section 30, Township 9 North, Range 35 East

As the siting criteria in Paragraph (4) of Subsection C of 19.15.17.10 NMAC (effective date of June 16, 2008), were met, Read and Stevens Inc. elected to use on-site trench burial for closure of the temporary pit used for drilling Frio 001 (API Number 30-037-20086). The waste met the criteria in Subparagraph (c) of Paragraph (3) of Subsection F of 19.15.17.13 NMAC. Reed and Stevens notified the surface owner, Robert Frost, on July 18, 2012 of the use of this closure method (see Attachment A).

The location of the on-site burial trench is as follows:

Being 0.088 acres of land

and said 0.088 acre tract being more particularly described as follows;

Commencing at a point with coordinates of (WGS 84 coordinate system):
Latitude 34.974399°
Longitude -103.269970°

Thence Notthwards a distance of 60.5 feet to a point with the coordinates of :
Latitude 34.974548°
Longitude -103.269980°

Thence Westwards a distance of 82.75 feet to a point with the coordinates of :
Latitude 34.974527°
Longitude -103.270250°

Thence Southwards a distance of 56.75 feet to a point with the coordinates of :
Latitude 34.974377°
Longitude -103.270238°

Thence Eastwards a distance of 81.75 feet to the point of beginning and containing 0.088 acres.

See Plate 1 attached hereto and incorporated herein by reference.

This notice is required because the Property described immediately above currently meets NMOCD requirements for Trench Burial Closure of a Temporary Drilling Pit. Based on the reports, the constituents of concern pose no significant present or future risk to humans or the environment based on the land use. No further remediation of the Property is required by the NMOCD as long as a person shall not build permanent structures over an onsite burial without the appropriate division district office's written approval.

As of the date of this Notice, the record owner of title to the Property is Robert Frost with an address of 1710- A Quay Rd.50, San Jon, NM 88434.

For additional information, contact:

New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

This Notice may be rendered of no further force or effect only by a superseding deed notice executed by the NMOCD or its successor agencies and filed with the County Clerk of Quay County, NM in the same Real Property Records as those in which this Deed Notice is filed.

Executed this 19th day of June, 2014.

By: David Hamilton

Name: David Hamilton

Title: Agent for Read & Stevens Inc,

STATE OF NEW MEXICO

(Quay) COUNTY

BEFORE ME, on this the 19th (date) day of June, 2014 (month and year), personally appeared David Hamilton (name), Agent (title), of Read & Stevens Inc. (company),

Known to me to be the person whose name is subscribed to the foregoing instrument, and they

Acknowledge to me that they executed the same for the purposes and consideration therein

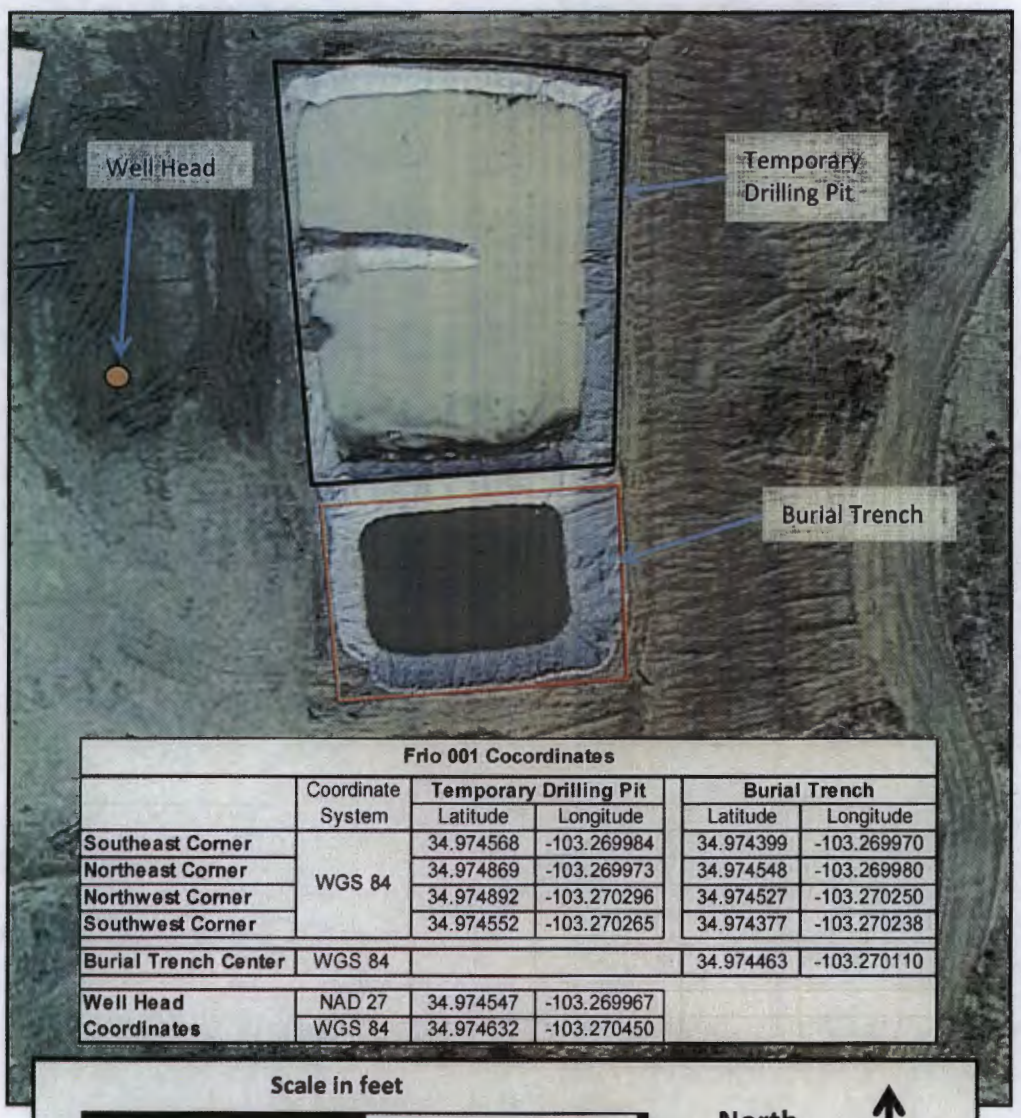
expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 19th day of June, 2014.

Cheryl Simpson

Notary Public in and for the State of New Mexico,
County of Quay

My Commission Expires: 8/25/2015



Frio 001 Cocordinates

	Coordinate System	Temporary Drilling Pit		Burial Trench	
		Latitude	Longitude	Latitude	Longitude
Southeast Corner	WGS 84	34.974568	-103.269984	34.974399	-103.269970
Northeast Corner		34.974869	-103.269973	34.974548	-103.269980
Northwest Corner		34.974892	-103.270296	34.974527	-103.270250
Southwest Corner		34.974552	-103.270265	34.974377	-103.270238
Burial Trench Center	WGS 84			34.974463	-103.270110
Well Head Coordinates	NAD 27	34.974547	-103.269967		
	WGS 84	34.974632	-103.270450		

Scale in feet

0 80 160

North

R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 505-266-5004	**Burial Trench Location at Frio 001 Site** **Unit K, Section 30, T9N, R 35E.**	**Plate 1**
	Reed and Stevens	**March, 2014**

Attachment 3

Submit To Appropriate District Office
Two Copies
District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-105
Revised August 1, 2011

1. WELL API NO.
30-037-20086

2. Type of Lease
☐ STATE ☒ FEE ☐ FED/INDIAN

3. State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4. Reason for filing:

☐ **COMPLETION REPORT** (Fill in boxes #1 through #31 for State and Fee wells only)

☒ **C-144 CLOSURE ATTACHMENT** (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)

5. Lease Name or Unit Agreement Name
Frio

6. Well Number:
001

7. Type of Completion:
☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER

8. Name of Operator
Read and Stevens Inc.

9. OGRID 18917

10. Address of Operator

11. Pool name or Wildcat

12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:										
BH:										

13. Date Spudded	14. Date T.D. Reached	15. Date Rig Released	16. Date Completed (Ready to Produce)	17. Elevations (DF and RKB, RT, GR, etc.)

18. Total Measured Depth of Well	19. Plug Back Measured Depth	20. Was Directional Survey Made?	21. Type Electric and Other Logs Run

22. Producing Interval(s), of this completion - Top, Bottom, Name

23. **CASING RECORD** (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET

26. Perforation record (interval, size, and number)

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED

28. **PRODUCTION**

Date First Production	Production Method *(Flowing, gas lift, pumping - Size and type pump)*	Well Status *(Prod. or Shut-in)*

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - *(Corr.)*

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*

30. Test Witnessed By

31. List Attachments

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit. See Plate 1

33. If an on-site burial was used at the well, report the exact location of the on-site burial: See Plate 1

Center of Burial trench (in WGS 84): Latitude 34.974463 Longitude -103.270110 NAD 1927 1983

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature | Printed Name | Title | Date

E-mail Address

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn A"
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville
T. Queen	T. Silurian	T. Menefee	T. Madison
T. Grayburg	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres	T. Simpson	T. Mancos	T. McCracken
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn	T.Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T.Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T.Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from.....to..... No. 3, from.....to.....

No. 2, from.....to..... No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

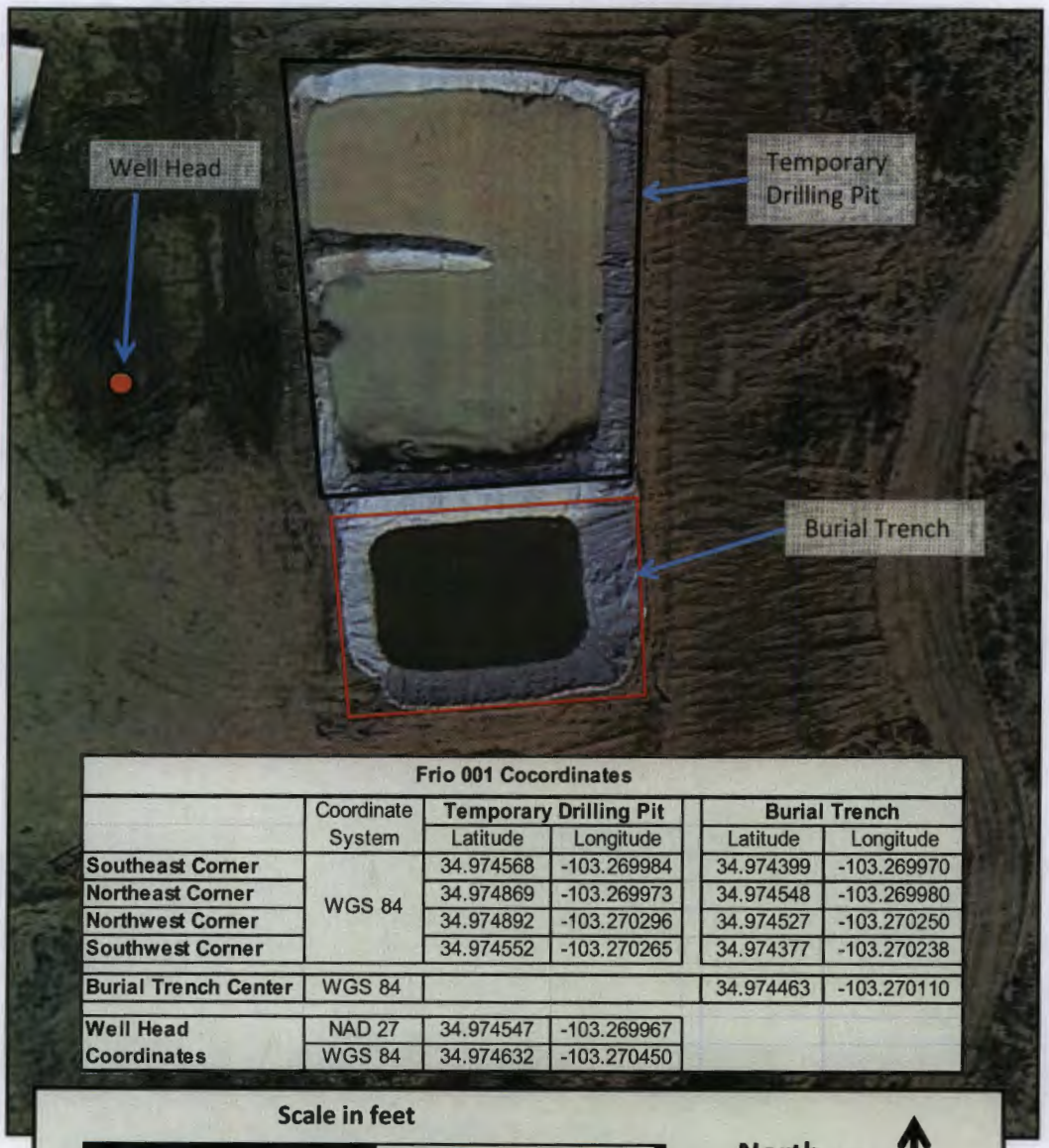
No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology



Frio 001 Cocordinates

	Coordinate System	Temporary Drilling Pit		Burial Trench	
		Latitude	Longitude	Latitude	Longitude
Southeast Corner	WGS 84	34.974568	-103.269984	34.974399	-103.269970
Northeast Corner		34.974869	-103.269973	34.974548	-103.269980
Northwest Corner		34.974892	-103.270296	34.974527	-103.270250
Southwest Corner		34.974552	-103.270265	34.974377	-103.270238
Burial Trench Center	WGS 84			34.974463	-103.270110
Well Head Coordinates	NAD 27	34.974547	-103.269967		
	WGS 84	34.974632	-103.270450		

Scale in feet

0 80 160

North

R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 505-266-5004	**Burial Trench Location at Frio 001 Site** **Unit K, Section 30, T9N, R 35E.**	**Plate 1**
	Reed and Stevens	**March, 2014**

Attachment 4

Confirmation Sampling Results

On September 21, 2012, a five-point composite sample was collected from immediately below the temporary drilling cell liner following the removal of the cuttings. The sample was submitted to Hall Environmental Laboratories in Albuquerque, N.M. for analysis of BTEX (8021B), GRO/DRO (8015M), TPH (418.1), and chloride (300.0).

Laboratory analysis demonstrated that the chloride concentration exceeded the standard (19.15.17.13 NMAC) All other concentrations were below the standard limits.

Field titration of trench samples from the temporary pit floor identified the western quadrants of the floor as the location of high chloride concentration soil. An additional 2.0 feet of soil were removed from the southwest quadrant and an additional 6 feet were removed from the northwest quadrant of the temporary pit floor to the burial trench.

The pit floor was resampled on October 23, 2012 with a second five-point composite sample collected from the reshaped temporary pit floor. The soil sample was submitted to Hall Environmental Laboratories for analysis of chloride. Both the field and laboratory results indicated that the chloride concentrations were below the standard limits. The table below is a summary of the confirmation sampling results.

Date	Analyte	Result	Detection Limit	19.15.17.13 NMAC Paragraph F, Subsection 3c, Closure Requirements for Trench Burial
		mg/kg		
Sept. 21	Benzene	ND	0.048	0.2
	Toluene	ND	0.048	
	Ethylbenzene	ND	0.048	
	Total Xylenes	ND	0.096	
	Total BTEX	< 0.240	0.240	50
	GRO	ND	4.8	
	DRO	ND	9.9	
	GRO-DRO Combined	<14.7	14.7	500
	TPH	ND	20	2500
	Chloride	3800	150	1000
Oct.23	Chloride	220	30	

The Laboratory reports are in Appendix A.

Attachment 5

Waste Sampling Results

On June 6, 2012, the first five-point composite sample of the waste material within the temporary drilling pit was collected. The sample was submitted to Hall Environmental Laboratories in Albuquerque, N.M. for analysis. As shown in Table 1, laboratory analysis demonstrated that the chloride concentration exceeded the standard (19.15.17.13 NMAC), as well as Chromium and BTEX. Note that the analyses are 'totals" and the SPLP result is calculated by dividing the totals result by 20, as approved by EPA and others. Also notice that Arsenic, Selenium, and Uranium were not detected" but the laboratory detection limits were higher than the standards. We do not consider this to be meaningful because the protocol of using totals analyses divided by 20 as a surrogate for SPLP results provides a *maximum* value according to EPA (see http://www.epa.gov/osw/hazard/testmethods/faq/faq_tclp.htm). Although, TPH analyses were below limits for trench burial (see Table 1), the method used was 8015M rather than Method 418.1. This error on our part is discussed in a later paragraph of this Attachment.

Table 2 shows the results from the next sampling event (July 18, 2012). Total BTEX decreased from a calculated 9.25 mg/L to 8.35 mg/L, a change of about 10%. All of these hydrocarbons exceeded the closure standard. However, chlorinated solvents were not detected in this sample and therefore meet the closure criteria for trench burial.

Table 3 presents results from September 21, 2012. This result shows that natural biodegradation and volatilization over 3 ½ months reduced the concentrations of BTEX to a measured 0.47 mg/L (Method 8260B/1312). We consider that the apparent decrease of 94% in these petroleum hydrocarbons is partly due to the use of a maximum concentration obtained through the protocol of using totals analyses divided by 20 compared to the leachate method above. BTEX are all within closure limits.

Table 4 presents results from October 23, 2012. This result shows that natural actions reduced the concentrations of Naphthalene to a calculated 0.014 mg/L. Naphthalene is within closure limits as calculated by dividing the totals results by 20.

Table 5 shows the results from the final sampling event on November 2, 2012. In this event, we captured several constituents not evaluated by earlier samples: Nitrate, Fluoride and Cyanide – all of which meet the closure standards for trench burial.

As stated above, the initial laboratory analysis of TPH was conducted using Method 8015 rather than 418.1. Because this result was transposed to Table 1 as TPH after the laboratory report was received, we did not catch this error until closure was complete. We are fully confident that the stabilized cuttings in the trench burial meet the closure standards despite this error. We provide three lines of evidence

1. Over the 3.5 months between the June 6 sampling event and the September 21 event, natural degradation and volatilization reduced the BTEX concentrations in the stabilized cuttings by 94% or more (see 3 paragraphs above). While we

do not believe that the larger molecules that also comprise TPH will undergo this same level of concentration reduction, a measureable reduction is expected.

2. The TPH measured by 8015 did not detect any MRO, the larger petroleum hydrocarbon molecules. Thus we can be certain that a significant reduction in TPH (using any method) occurred between June 6 and final closure.
3. In 2013-14, we studied the difference in results between TPH using Method 8015 and Method 418.1. Our evaluation is presented below

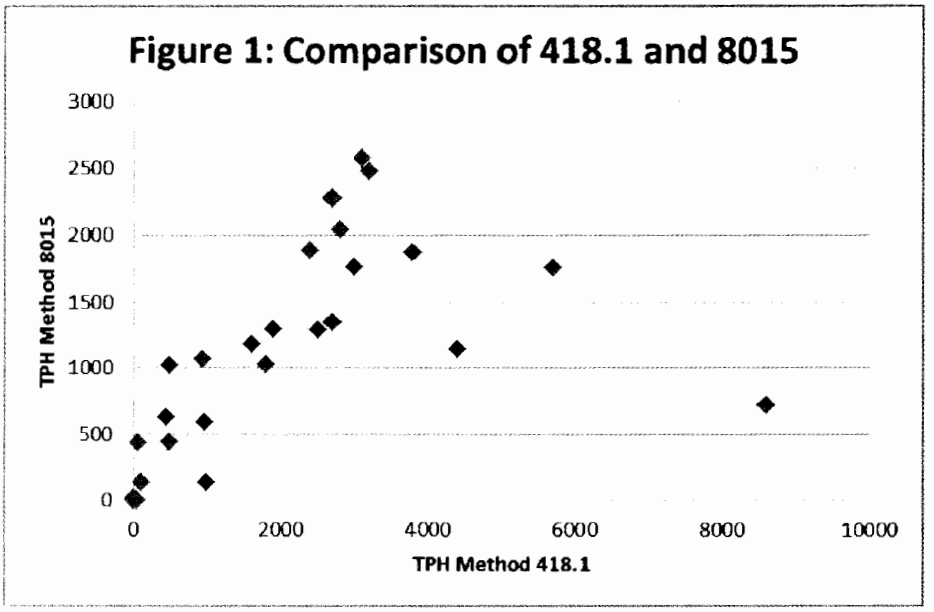


Figure 1 presents laboratory results of 24 samples from drilling pit solids in southeast New Mexico – some are un-stabilized solids and some are stabilized by adding 3 parts clean soil. All results are from Hall Environmental Laboratories. While the entire study included 51 samples, Figure 1 shows only those with TPH 8015 values below 2500 mg/kg. As with all soil samples, heterogeneity of the sample can result in different results from the same pit or from the same sample jar. Outliers are not uncommon with soil samples and we believe three samples showing the highest TPH 418.1 results are such outliers.

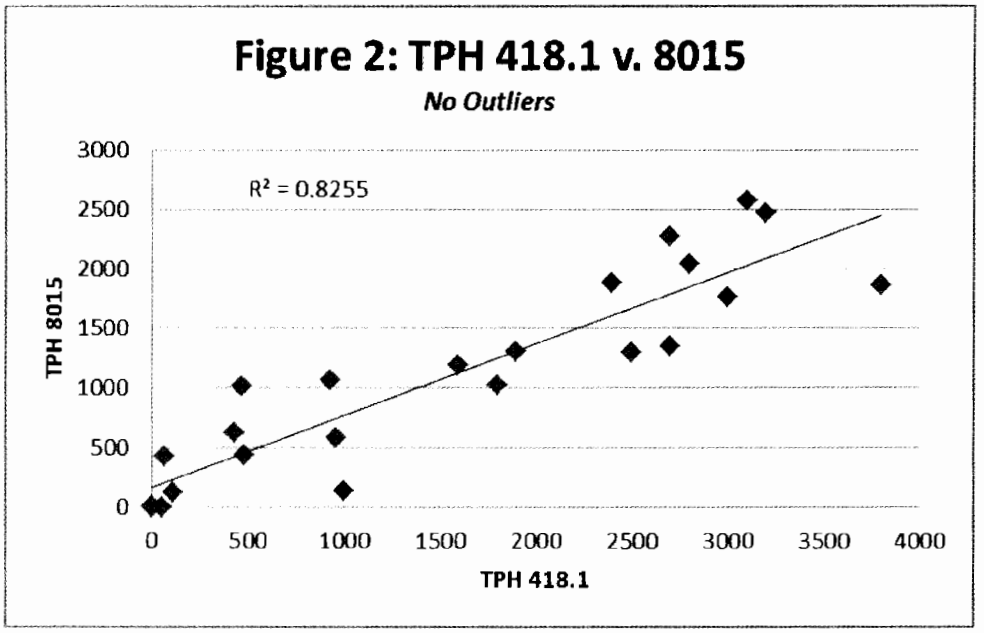


Figure 2 uses the same data as Figure 1 but eliminates the three outliers. The elimination of the outliers provides an excellent correlation coefficient, especially considering these are heterogeneous sludge/soil-like samples. A TPH 8015 result greater than 1500 mg/kg is likely to exceed the 2500 mg/kg limit on TPH using the 418.1 Method. The June 6 TPH 8015 result is 1030 mg/kg. We conclude with a high degree of confidence that the TPH 418.1 result was less than the 2500 mg/kg standard at this time. Five months later, when the solids were buried in the trench, we conclude with a very high degree of certainty that the TPH using a 418.1 Method would be well below the 2500 mg/kg limit for trench burial.

All laboratory results are in Appendix A

Table 1: *Sampling Results from June 6, 2012. Results in yellow exceed required concentrations. Not all constituents of concern were analyzed for.*

Analyte	Laboratory Concentration (ND indicates no detection)	Method Detection Limit	Concentration of soil by constituent analysis converted to TCLP analysis. See EPA reference below	Method Detection Limit in mg/L	19.15.17.13 NMAC Section F, Subsection 3c Closure Requirements for Trench Burial and Subsection A of 20.6.2.3103 NMAC
	[mg/kg]				[mg/kg]
TPH (Sum of DRO, MRO, GRO)	1030	311			2500
	[mg/kg]		[mg/L]		[mg/L]
Chloride	72000	3000	3600.0	150.0	3000
	[mg/kg]				
Fluoride			0.000	0.000	1.6
Mercury	ND	0.033	ND	0.002	0.002
Cyanide			0.000	0.000	0.02
Nitrate (NO3 as N)			0.000	0.000	10
Arsenic	ND	2.50		0.125	0.1
Barium	14	0.10	0.700	0.005	1
Cadmium	ND	0.10		0.005	0.01
Chromium	12	0.30	0.600	0.015	0.05
Lead	0.06	0.25	0.003	0.013	0.05
Selenium	ND	2.50		0.125	0.05
Silver	ND	0.25		0.013	0.05
Uranium	ND	5.00		0.250	0.03
	pCi/L				
Radium 226	0.96	0.273			
Radium 228	1.37	0.037			pCi/L
Radioactivity	2.33	0.31			30
	mg/kg		[mg/L]		mg/L
Benzene	25	2.50	1.25	0.125	0.01
Toluene	77	2.50	3.85	0.125	0.75
Ethylbenzene	26	2.50	1.3	0.125	0.75
Total Xylenes	57	5.00	2.85	0.25	0.62
PCB's					0.001
Carbon Tetrachloride					0.01
1,2-dichloroethane (EDC)					0.01
1,1-dichloroethylene(1.1-DCE)					0.005
1,1,2,2 - tetrachloroethylene (PCE)					0.02
1,1,2 - trichloroethylene (TCE)					0.1
Methylene Chloride					0.1
Chloroform					0.1
1,1 - dichloroethane					0.025
	ug/kg				
Ethylene dibromide (EDB)					0.0001
	mg/kg				
1,1,1 - trichloroethane					0.06
1,1,2 - trichloroethane					0.01
1,1,2,2 - tetrachloroethane					0.01
Vinyl chloride					0.001
(PAH's) total napththalene plus monomethylnaphthalenes					0.03
	mg/kg				
Benzo-a-pyrene					0.0007

http://www.epa.gov/osw/hazard/testmethods/faq/faq_tclp.htm#content

Table 2: *Sampling results from July 18. Results in yellow exceed required concentrations. Not all constituents of concern were analyzed for.*

Analyte	Laboratory Concentration (ND indicates no detection)	Method Detection Limit	Concentration of soil by constituent analysis converted to TCLP analysis. See EPA reference below	Method Detection Limit in mg/L	19.15.17.13 NMAC Section F, Subsection 3c Closure Requirements for Trench Burial and Subsection A of 20.6.2.3103 NMAC
	[mg/kg]				[mg/kg]
TPH					2500
	[mg/kg]		[mg/L]		[mg/L]
Chloride	56000	3000	2800.0	150.0	3000
	[mg/L]				
Fluoride					1.6
Mercury					0.002
Cyanide					0.02
Nitrate (NO3 as N)					10
Arsenic					0.1
Barium					1
Cadmium					0.01
Chromium					0.05
Lead					0.05
Selenium					0.05
Silver					0.05
Uranium					0.03
	pCi/L				
Radium 226					
Radium 228					pCi/L
Radioactivity					30
	mg/kg		[mg/L]		mg/L
Benzene	23	0.93	1.15	0.0465	0.01
Toluene	69	0.93	3.45	0.0465	0.75
Ethylbenzene	24	0.93	1.2	0.0465	0.75
Total Xylenes	51	1.90	2.55	0.095	0.62
PCB's	ND	0.02		0.001	0.001
Carbon Tetrachloride	ND	1.00		0.05	0.01
1,2-dichloroethane (EDC)	ND	0.93		0.0465	0.01
1,1-dichloroethylene(1.1-DCE)	ND	0.93		0.0465	0.005
1,1,2,2 - tetrachloroethylene (PCE)	ND	0.93		0.0465	0.02
1,1,2 - trichloroethylene (TCE)	ND	0.93		0.0465	0.1
Methylene Chloride	ND	2.80		0.14	0.1
Chloroform	ND	0.93		0.0465	0.1
1,1 - dichloroethane	ND	1.00		0.05	0.025
	ug/kg				
Ethylene dibromide (EDB)	ND	0.10		0.00000495	0.0001
	mg/kg				
1,1,1 - trichloroethane	ND	0.93		0.0465	0.06
1,1,2 - trichloroethane	ND	0.93		0.0465	0.01
1,1,2,2 - tetrachloroethane	ND	0.93		0.0465	0.01
Vinyl chloride	ND	0.93		0.0465	0.001
(PAH's) total napthhalene plus monomethylnaphthalenes	3	2.50	0.15	0.125	0.03
	mg/kg				
Benzo-a-pyrene	ND	0.10		0.005	0.0007

http://www.epa.gov/osw/hazard/testmethods/faq/faq_tclp.htm#content

Table 3: *Sampling results from September 21, 2012*

Analyte	Laboratory Concentration (ND indicates no detection)	Method Detection Limit	Concentration of soil by constituent analysis converted to TCLP analysis. See EPA reference below	Method Detection Limit in mg/L	19.15.17.13 NMAC Section F, Subsection 3c Closure Requirements for Trench Burial and Subsection A of 20.6.2.3103 NMAC
	[mg/kg]				[mg/kg]
TPH (Sum of DRO, MRO, GRO)					2500
	[mg/kg]		[mg/L]		[mg/L]
Chloride					3000
	[mg/kg]		[mg/L]		
Fluoride					1.6
Mercury					0.002
Cyanide					0.02
Nitrate (NO3 as N)					10
Arsenic					0.1
Barium					1
Cadmium					0.01
Chromium	ND	5	ND	0.25	0.05
Lead					0.05
Selenium					0.05
Silver					0.05
Uranium					0.03
	pCi/L				
Radium 226					
Radium 228					pCi/L
Radioactivity					30
	ug/L		[mg/L]		mg/L
Benzene	5.1	5.00	0.005	0.005	0.01
Toluene	120	5.00	0.120	0.005	0.75
Ethylbenzene	91	5.00	0.091	0.005	0.75
Total Xylenes	250	7.50	0.250	0.008	0.62
PCB's					
Carbon Tetrachloride					
1,2-dichloroethane (EDC)					
1,1-dichloroethylene(1.1-DCE)					
1,1,2,2 - tetrachloroethylene (PCE)					
1,1,2 - trichloroethylene (TCE)					
Methylene Chloride					
Chloroform					
1,1 - dichloroethane					
Ethylene dibromide (EDB)					
1,1,1 - trichloroethane					
1,1,2 - trichloroethane					
1,1,2,2 - tetrachloroethane					
Vinyl chloride					
	ug/L		[mg/L]		
(PAH's) total napththalene plus monomethylnaphthalenes	75	20.00	0.075	0.02	0.03
	mg/kg				
Benzo-a-pyrene					

http://www.epa.gov/osw/hazard/testmethods/faq/faq_tclp.htm#content

Table 4: *Sampling results from October 23, 2012.*

Analyte	Laboratory Concentration (ND indicates no detection)	Method Detection Limit	Concentration of soil by constituent analysis converted to TCLP analysis. See EPA reference below	Method Detection Limit in mg/L	19.15.17.13 NMAC Section F, Subsection 3c Closure Requirements for Trench Burial and Subsection A of 20.6.2.3103 NMAC
	[mg/kg]				[mg/kg]
TPH (Sum of DRO, MRO, GRO)					2500
	[mg/kg]		[mg/L]		[mg/L]
Chloride					3000
	[mg/kg]		[mg/L]		
Fluoride					1.6
Mercury					0.002
Cyanide					0.02
Nitrate (NO3 as N)					10
Arsenic					0.1
Barium					1
Cadmium					0.01
Chromium					0.05
Lead					0.05
Selenium					0.05
Silver					0.05
Uranium					0.03
	pCi/L				
Radium 226					
Radium 228					pCi/L
Radioactivity					30
	ug/L		[mg/L]		mg/L
Benzene					0.01
Toluene					0.75
Ethylbenzene					0.75
Total Xylenes					0.62
PCB's					0.001
Carbon Tetrachloride					0.01
1,2-dichloroethane (EDC)					0.01
1,1-dichloroethylene(1.1-DCE)					0.005
1,1,2,2 - tetrachloroethylene (PCE)					0.02
1,1,2 - trichloroethylene (TCE)					0.1
Methylene Chloride					0.1
Chloroform					0.1
1,1 - dichloroethane					0.025
	ug/kg				
Ethylene dibromide (EDB)					0.0001
	mg/kg				
1,1,1 - trichloroethane					0.06
1,1,2 - trichloroethane					0.01
1,1,2,2 - tetrachloroethane					0.01
Vinyl chloride					0.001
	mg/kg		[mg/L]		
(PAH's) total napththalene plus monomethylnaphthalenes	ND	0.29	<.0.014	0.014	0.03
	mg/kg				
Benzo-a-pyrene					0.0007

http://www.epa.gov/osw/hazard/testmethods/faq/faq_tclp.htm#content

Table 5: *Sampling results from November 2, 2012.*

Analyte	Laboratory Concentration (ND indicates no detection)	Method Detection Limit	Concentration of soil by constituent analysis converted to TCLP analysis. See EPA reference below	Method Detection Limit in mg/L	19.15.17.13 NMAC Section F, Subsection 3c Closure Requirements for Trench Burial and Subsection A of 20.6.2.3103 NMAC
	[mg/kg]				[mg/kg]
TPH (Sum of DRO, MRO, GRO)					2500
	[mg/kg]		[mg/L]		[mg/L]
Chloride					3000
	[mg/kg]		[mg/L]		
Fluoride	2.1	0.3	0.105	0.015	1.6
Mercury					0.002
Cyanide	ND	0.3		0.015	0.02
Nitrate (NO3 as N)	7.7	0.3	0.385	0.015	10
Arsenic					0.1
Barium					1
Cadmium					0.01
Chromium					0.05
Lead					0.05
Selenium					0.05
Silver					0.05
Uranium					0.03
	pCi/L				
Radium 226					
Radium 228					pCi/L
Radioactivity					30
	ug/L		[mg/L]		mg/L
Benzene					0.01
Toluene					0.75
Ethylbenzene					0.75
Total Xylenes					0.62
PCB's					0.001
Carbon Tetrachloride					0.01
1,2-dichloroethane (EDC)					0.01
1,1-dichloroethylene(1.1-DCE)					0.005
1,1,2,2 - tetrachloroethylene (PCE)					0.02
1,1,2 - trichloroethylene (TCE)					0.1
Methylene Chloride					0.1
Chloroform					0.1
1,1 - dichloroethane					0.025
	ug/kg				
Ethylene dibromide (EDB)					0.0001
	mg/kg				
1,1,1 - trichloroethane					0.06
1,1,2 - trichloroethane					0.01
1,1,2,2 - tetrachloroethane					0.01
Vinyl chloride					0.001
(PAH's) total napththalene plus monomethylnaphthalenes					0.03
	mg/kg				
Benzo-a-pyrene					0.0007

http://www.epa.gov/osw/hazard/testmethods/faq/faq_tclp.htm#content

Attachment 6

Protocols and Procedures used for the On-Site Trench Burial

In addition to the General Conditions Protocols and Procedures listed in Paragraph F of 19.15.17.13 NMAC, the operator employed the following steps for On-Site Trench Burial of the pit.

1. The operator stabilized the waste to permit transfer from the pit to the separate trench and sufficient to support the final cover.
2. The mixing ratio was no more than 2:1, (2 parts clean fill soil to 1 part drilling waste).
3. After stabilization of the waste material sufficient to support the soil cover, the mixture was sampled pursuant to NMOCD Rules (see below) and placed in the burial trench.

Construction/Design of Burial Trench

The operator designed and constructed an on-site trench for closure as specified in 19.15.17.13 B.(2) NMAC. Specifically:

I. Steve Kent Construction used the fluids pit located 10 feet south of the temporary pit with dimensions of 80-feet by 60-feet by 15-feet deep pursuant to 19.15.17.13 NMAC .
II. The on-site trench had a properly constructed foundation and side walls consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities. .
III. The on-site trench was lined with a geomembrane liner that consisted of a 20-mil string reinforced HDPE liner. The liner material complies with EPA SW-846 method 9090A.
IV. The contractor for the operator oriented the liner seam along the length of the trench. Prior to welding the field seam, the contractor overlapped the liners four to six inches. As the trench shape was rectangular, the liner seam was oriented up and down the trench end slopes. The seams ran along the bottom of the trench, parallel to the junction with the pit sides, *i.e.*, oriented along, not across, the slope.
V. Sufficient liner material was used to reduce stress-strain on the liner..
VI. The upper edges of the liner were buried in a one-foot ditch to secure them.
VII. The waste material was stabilized at a ratio of 2:1 (2 parts clean fill to 1 part drilling waste)
VIII. The stabilized waste material was placed in the burial trench. The material was shaped as possible to be highest in the middle of the burial trench and at least 4 feet below the original surface..
IX. The excess portions of the liner were then folded over the waste material in the burial trench. Additional portions of liner were used to completely cover the cuttings and over the edges of the bottom liner in a shingle type pattern. In this way, downward-moving vadose zone water, when intersecting the liner

will be carried laterally away from the footprint of the burial trench without ponding in the subsurface above the trench burial or creating a pathway for vadose zone water to enter the burial trench.

X. Soil stockpiled from the original excavations of the temporary pit was placed over the lined waste material with top soil placed last. The land was contoured to mimic the original spur that was part of the higher terrain to the east.

Figure 1: Looking to the west. Materials are being moved from the temporary drilling pit on the north (right) to the burial trench on the south (left).

Site Reclamation Plan

After the pit was closed, the pit location and all areas associated with the pit were reclaimed to a safe and stable condition that blends with the surrounding undisturbed area. The soil cover was placed and contoured to blend with the original topography according to Paragraph I of 19.15.17.13 NMAC.

Soil Cover Design Plan

The soil cover consists of at least four feet of compacted, non-waste containing, earthen material. The uppermost topsoil is equal to the background thickness of about one foot. It is nowhere less than one foot of suitable material in order to establish vegetation at the site. This is in accordance with Subsection I of 19.15.17.13 NMAC.

The soil cover conforms to the site's previous grade and was smoothed to prevent ponding of water and erosion of the cover material.

Attachment 7

Re-vegetation Plan

1. In late November, 2012, Steven Moore of Organic Technology International seeded the pit area and adjacent disturbed areas by drilling along the contours. An additional supplemental seeding was finished in July 2013 to benefit from the "monsoon" season.
2. The seed mix was approved by the private land owner. It is presented immediately following.
3. During the next two growing seasons to prove viability, there will be no artificial irrigation of the vegetation.
4. The operator, Read and Stevens, will repeat seeding or planting until it successfully achieves the required vegetative cover.
5. If conditions are not favorable for the establishment of vegetation, such as periods of drought, Read and Stevens may request that the division allow a delay in additional seeding until soil moisture conditions become favorable.
6. The operator will notify the division when it successfully achieves re-vegetation.

Bamert Seed Company Inc.

1897 CR 1018 Muleshoe, TX 79347 (800) 262-9892 Permit # TX00905

SEGMENT#3: PREMIUM PASTURE BLEND: PO#90-02634 **INV52718**

Description	Pure Seed	Genn	Dormant	Origin
Bristlegrass, Plains. "VNS" (Setaria vulpiseta)	19.51%	88.00%	3.00%	TX
Buffalograss, "Plains" Primed KN03 (Bouteloua dactyloide	14.95%	95.00%	0.00%	TX
Grama, Blue "Hachita" (Bouteloua gracilis)	4.39%	89.00%	0.00%	TX
Grama, Sideoats "El Reno" (Bouteloua curtipendula)	8.99%	94.00%	0.00%	TX
Green Sprangletop. "Van Horn" (Leptochloa dubia)	9.97%	93.00%	0.00%	TX
Switchgrass, "Alamo" (Panicum virgatum)	14.80%	89.00%	0.00%	
Switchgrass, "Blackwell" (Panicum virgatum)	14.99%	77.00%	16.00%	TX
Wheatgrass, Western. "Arriba" (Pascopyrum smithii)	4.45%	95.00%	0.00%	WA

Purity: 92.05% Inert Matter: 7.50% Other Crop Seed: 0.38% Weed Seed: 0.07%

Noxious Weeds: None Test Date: 0/2013 Net Wt: 40.00 lbs

Save

Appendix A
Confirmatory Sampling

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

October 02, 2012

David Hamilton

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: Frio OrderNo.: 1209B21

Dear David Hamilton:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/25/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1209B21**
Date Reported: **10/2/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: N Pit 35
Project: Frio
Collection Date: 9/21/2012 4:10:00 AM
Lab ID: 1209B21-001 **Matrix:** SOIL **Received Date:** 9/25/2012 2:42:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/27/2012 10:21:26 AM
Surr: DNOP	113	77.6-140		%REC	1	9/27/2012 10:21:26 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2012 7:55:45 PM
Surr: BFB	99.1	84-116		%REC	1	9/29/2012 7:55:45 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.048		mg/Kg	1	9/29/2012 7:55:45 PM
Toluene	ND	0.048		mg/Kg	1	9/29/2012 7:55:45 PM
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2012 7:55:45 PM
Xylenes, Total	ND	0.095		mg/Kg	1	9/29/2012 7:55:45 PM
Surr: 4-Bromofluorobenzene	98.0	80-120		%REC	1	9/29/2012 7:55:45 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	3800	150		mg/Kg	100	9/28/2012 6:25:35 AM
EPA METHOD 418.1: TPH						Analyst: **JMP**
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	9/27/2012

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
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#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3971**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **3971**	RunNo: **5835**
Prep Date: **9/27/2012**	Analysis Date: **9/27/2012**	SeqNo: **167760** Units: **mg/Kg**

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

Sample ID **LCS-3971**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **3971**	RunNo: **5835**
Prep Date: **9/27/2012**	Analysis Date: **9/27/2012**	SeqNo: **167761** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.8	90	110			

Sample ID **1209A79-017AMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **3971**	RunNo: **5835**
Prep Date: **9/27/2012**	Analysis Date: **9/27/2012**	SeqNo: **167792** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	7.7	15.33	1.883	92.7	64.4	117			

Sample ID **1209A79-017AMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **3971**	RunNo: **5835**
Prep Date: **9/27/2012**	Analysis Date: **9/27/2012**	SeqNo: **167793** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	7.7	15.33	1.883	91.8	64.4	117	0.836	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3949**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS**	Batch ID: **3949**	RunNo: **5805**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166952** 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-3949**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS**	Batch ID: **3949**	RunNo: **5805**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166953** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	94	20	100.0	0	94.3	80	120			

Sample ID **LCSD-3949**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02**	Batch ID: **3949**	RunNo: **5805**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166954** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	98	20	100.0	0	98.4	80	120	4.30	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3948**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3948**	RunNo: **5796**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166783** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		108	77.6	140			

Sample ID **LCS-3948**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3948**	RunNo: **5796**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166784** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.8	52.6	130			
Surr: DNOP	4.8		5.000		96.0	77.6	140			

Sample ID **1209B13-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **3948**	RunNo: **5796**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166973** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.9	49.70	31.03	23.3	57.2	146			S
Surr: DNOP	4.4		4.970		88.6	77.6	140			

Sample ID **1209B13-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **3948**	RunNo: **5796**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **167001** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.9	49.60	31.03	24.9	57.2	146	1.77	24.5	S
Surr: DNOP	4.7		4.960		94.0	77.6	140	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3940**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168217** 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	980		1000		98.4	84	116			

Sample ID **LCS-3940**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168218** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.8	74	117			
Surr: BFB	1000		1000		105	84	116			

Sample ID **1209A69-002AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5856**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168360** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	24.11	0	89.4	70	130			
Surr: BFB	1100		964.3		110	84	116			

Sample ID **1209A69-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5856**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168361** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	24.20	0	85.0	70	130	4.57	22.1	
Surr: BFB	1000		968.1		107	84	116	0	0	

Sample ID **MB-4004**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **4004**	RunNo: **5859**
Prep Date: **9/29/2012**	Analysis Date: **9/30/2012**	SeqNo: **168574** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		97.0	84	116			

Sample ID **LCS-4004**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **4004**	RunNo: **5859**
Prep Date: **9/29/2012**	Analysis Date: **9/30/2012**	SeqNo: **168575** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		99.8	84	116			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3940**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168236** 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	0.98		1.000		98.1	80	120			

Sample ID **LCS-3940**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168237** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.050	1.000	0	89.6	76.3	117			
Toluene	0.89	0.050	1.000	0	89.1	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.8	77	116			
Xylenes, Total	2.7	0.10	3.000	0	91.4	76.7	117			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID **1209A90-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5856**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168389** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.75	0.095	0.9479	0	79.6	67.2	113			
Toluene	0.78	0.095	0.9479	0	82.1	62.1	116			
Ethylbenzene	0.81	0.095	0.9479	0.009252	84.1	67.9	127			
Xylenes, Total	2.4	0.19	2.844	0.03618	83.6	60.6	134			
Surr: 4-Bromofluorobenzene	1.9		1.896		102	80	120			

Sample ID **1209A90-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5856**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168390** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.095	0.9506	0	88.3	67.2	113	10.7	14.3	
Toluene	0.86	0.095	0.9506	0	90.4	62.1	116	9.88	15.9	
Ethylbenzene	0.87	0.095	0.9506	0.009252	90.5	67.9	127	7.50	14.4	
Xylenes, Total	2.6	0.19	2.852	0.03618	90.2	60.6	134	7.76	12.6	
Surr: 4-Bromofluorobenzene	1.9		1.901		101	80	120	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-4004**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **4004**	RunNo: **5859**
Prep Date: **9/29/2012**	Analysis Date: **9/30/2012**	SeqNo: **168614** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		97.4	80	120			

Sample ID **LCS-4004**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **4004**	RunNo: **5859**
Prep Date: **9/29/2012**	Analysis Date: **9/30/2012**	SeqNo: **168615** 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			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **mb-3940** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBS** Batch ID: **3940** RunNo: **5874**

Prep Date: **9/26/2012** Analysis Date: **9/30/2012** SeqNo: **169090** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.2	70	130			
Surr: 4-Bromofluorobenzene	0.38		0.5000		75.8	70	130			
Surr: Dibromofluoromethane	0.36		0.5000		71.4	70	130			
Surr: Toluene-d8	0.36		0.5000		72.9	70	130			

Sample ID **lcs-3940** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSS** Batch ID: **3940** RunNo: **5874**

Prep Date: **9/26/2012** Analysis Date: **9/30/2012** SeqNo: **169092** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.3	70	130			
Surr: 4-Bromofluorobenzene	0.38		0.5000		76.1	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.37		0.5000		73.5	70	130			

Sample ID **1209a69-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **BatchQC** Batch ID: **3940** RunNo: **5874**

Prep Date: **9/26/2012** Analysis Date: **9/30/2012** SeqNo: **169093** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.40		0.4878		81.8	70	130			
Surr: 4-Bromofluorobenzene	0.38		0.4878		77.3	70	130			
Surr: Dibromofluoromethane	0.51		0.4878		104	70	130			
Surr: Toluene-d8	0.35		0.4878		72.6	70	130			

Sample ID **1209a69-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **BatchQC** Batch ID: **3940** RunNo: **5874**

Prep Date: **9/26/2012** Analysis Date: **9/30/2012** SeqNo: **169094** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.41		0.4869		83.3	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.37		0.4869		75.9	70	130	0	0	
Surr: Dibromofluoromethane	0.50		0.4869		103	70	130	0	0	
Surr: Toluene-d8	0.35		0.4869		72.9	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD 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: 1209B21

Received by/date: MG 09/25/12

Logged By: Ashley Gallegos 9/25/2012 2:42:00 PM

Completed By: Ashley Gallegos 9/25/2012 3:27:26 PM

Reviewed By: 09/26/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ☑	No ☐	NA ☐
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. 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)

17. 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: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.5	Good	Not Present			

Chain-of-Custody Record

Client: RT Hicks Consultants

Mailing Address: 901 Rio Grande NW
Suite F-142

Phone #: 505 266 5004

email or Fax#: david@rthicksconsult.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name:
Fria

Project #:

Project Manager:
D Hamilton

Sampler: DH

On Ice: ☒ Yes ☐ No

Sample Temperature: 14.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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. 1209821	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)					Air Bubbles (Y or N)
9-21	14:10	soil	NP.t 35	1-4oz glass jar		-001	X		X	X				X								

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
9-25	14:42	David Hamilton	Mike Gr	09/25/12	1442
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Appendix A

Waste Material Sampling

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

October 02, 2012

David Hamilton

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: Frio OrderNo.: 1209B21

Dear David Hamilton:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/25/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1209B21**
Date Reported: **10/2/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: N Pit 35
Project: Frio
Collection Date: 9/21/2012 4:10:00 AM
Lab ID: 1209B21-001
Matrix: SOIL
Received Date: 9/25/2012 2:42:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/27/2012 10:21:26 AM
Surr: DNOP	113	77.6-140		%REC	1	9/27/2012 10:21:26 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2012 7:55:45 PM
Surr: BFB	99.1	84-116		%REC	1	9/29/2012 7:55:45 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.048		mg/Kg	1	9/29/2012 7:55:45 PM
Toluene	ND	0.048		mg/Kg	1	9/29/2012 7:55:45 PM
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2012 7:55:45 PM
Xylenes, Total	ND	0.095		mg/Kg	1	9/29/2012 7:55:45 PM
Surr: 4-Bromofluorobenzene	98.0	80-120		%REC	1	9/29/2012 7:55:45 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	3800	150		mg/Kg	100	9/28/2012 6:25:35 AM
EPA METHOD 418.1: TPH						Analyst: **JMP**
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	9/27/2012

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
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#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3971**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **3971**	RunNo: **5835**
Prep Date: **9/27/2012**	Analysis Date: **9/27/2012**	SeqNo: **167760** Units: **mg/Kg**

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

Sample ID **LCS-3971**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **3971**	RunNo: **5835**
Prep Date: **9/27/2012**	Analysis Date: **9/27/2012**	SeqNo: **167761** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.8	90	110			

Sample ID **1209A79-017AMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **3971**	RunNo: **5835**
Prep Date: **9/27/2012**	Analysis Date: **9/27/2012**	SeqNo: **167792** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	7.7	15.33	1.883	92.7	64.4	117			

Sample ID **1209A79-017AMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **3971**	RunNo: **5835**
Prep Date: **9/27/2012**	Analysis Date: **9/27/2012**	SeqNo: **167793** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	7.7	15.33	1.883	91.8	64.4	117	0.836	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3949**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS**	Batch ID: **3949**	RunNo: **5805**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166952** 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-3949**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS**	Batch ID: **3949**	RunNo: **5805**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166953** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	94	20	100.0	0	94.3	80	120			

Sample ID **LCSD-3949**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02**	Batch ID: **3949**	RunNo: **5805**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166954** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	98	20	100.0	0	98.4	80	120	4.30	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3948**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3948**	RunNo: **5796**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166783** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		108	77.6	140			

Sample ID **LCS-3948**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3948**	RunNo: **5796**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166784** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.8	52.6	130			
Surr: DNOP	4.8		5.000		96.0	77.6	140			

Sample ID **1209B13-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **3948**	RunNo: **5796**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166973** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.9	49.70	31.03	23.3	57.2	146			S
Surr: DNOP	4.4		4.970		88.6	77.6	140			

Sample ID **1209B13-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **3948**	RunNo: **5796**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **167001** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.9	49.60	31.03	24.9	57.2	146	1.77	24.5	S
Surr: DNOP	4.7		4.960		94.0	77.6	140	0	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
- P Sample pH greater than 2
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3940**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168217** 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	980		1000		98.4	84	116			

Sample ID **LCS-3940**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168218** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.8	74	117			
Surr: BFB	1000		1000		105	84	116			

Sample ID **1209A69-002AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5856**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168360** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	24.11	0	89.4	70	130			
Surr: BFB	1100		964.3		110	84	116			

Sample ID **1209A69-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5856**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168361** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	24.20	0	85.0	70	130	4.57	22.1	
Surr: BFB	1000		968.1		107	84	116	0	0	

Sample ID **MB-4004**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **4004**	RunNo: **5859**
Prep Date: **9/29/2012**	Analysis Date: **9/30/2012**	SeqNo: **168574** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		97.0	84	116			

Sample ID **LCS-4004**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **4004**	RunNo: **5859**
Prep Date: **9/29/2012**	Analysis Date: **9/30/2012**	SeqNo: **168575** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		99.8	84	116			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3940**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168236** 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	0.98		1.000		98.1	80	120			

Sample ID **LCS-3940**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168237** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.050	1.000	0	89.6	76.3	117			
Toluene	0.89	0.050	1.000	0	89.1	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.8	77	116			
Xylenes, Total	2.7	0.10	3.000	0	91.4	76.7	117			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID **1209A90-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5856**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168389** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.75	0.095	0.9479	0	79.6	67.2	113			
Toluene	0.78	0.095	0.9479	0	82.1	62.1	116			
Ethylbenzene	0.81	0.095	0.9479	0.009252	84.1	67.9	127			
Xylenes, Total	2.4	0.19	2.844	0.03618	83.6	60.6	134			
Surr: 4-Bromofluorobenzene	1.9		1.896		102	80	120			

Sample ID **1209A90-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5856**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168390** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.095	0.9506	0	88.3	67.2	113	10.7	14.3	
Toluene	0.86	0.095	0.9506	0	90.4	62.1	116	9.88	15.9	
Ethylbenzene	0.87	0.095	0.9506	0.009252	90.5	67.9	127	7.50	14.4	
Xylenes, Total	2.6	0.19	2.852	0.03618	90.2	60.6	134	7.76	12.6	
Surr: 4-Bromofluorobenzene	1.9		1.901		101	80	120	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-4004**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **4004**	RunNo: **5859**
Prep Date: **9/29/2012**	Analysis Date: **9/30/2012**	SeqNo: **168614** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		97.4	80	120			

Sample ID **LCS-4004**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **4004**	RunNo: **5859**
Prep Date: **9/29/2012**	Analysis Date: **9/30/2012**	SeqNo: **168615** 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			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B21**

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **mb-3940**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **3940**	RunNo: **5874**
Prep Date: **9/26/2012**	Analysis Date: **9/30/2012**	SeqNo: **169090** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.2	70	130			
Surr: 4-Bromofluorobenzene	0.38		0.5000		75.8	70	130			
Surr: Dibromofluoromethane	0.36		0.5000		71.4	70	130			
Surr: Toluene-d8	0.36		0.5000		72.9	70	130			

Sample ID **lcs-3940**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **3940**	RunNo: **5874**
Prep Date: **9/26/2012**	Analysis Date: **9/30/2012**	SeqNo: **169092** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.3	70	130			
Surr: 4-Bromofluorobenzene	0.38		0.5000		76.1	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.37		0.5000		73.5	70	130			

Sample ID **1209a69-001ams**	SampType: **MS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5874**
Prep Date: **9/26/2012**	Analysis Date: **9/30/2012**	SeqNo: **169093** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.40		0.4878		81.8	70	130			
Surr: 4-Bromofluorobenzene	0.38		0.4878		77.3	70	130			
Surr: Dibromofluoromethane	0.51		0.4878		104	70	130			
Surr: Toluene-d8	0.35		0.4878		72.6	70	130			

Sample ID **1209a69-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5874**
Prep Date: **9/26/2012**	Analysis Date: **9/30/2012**	SeqNo: **169094** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.41		0.4869		83.3	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.37		0.4869		75.9	70	130	0	0	
Surr: Dibromofluoromethane	0.50		0.4869		103	70	130	0	0	
Surr: Toluene-d8	0.35		0.4869		72.9	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD 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: 1209B21

Received by/date: MG 09/25/12

Logged By: Ashley Gallegos 9/25/2012 2:42:00 PM

Completed By: Ashley Gallegos 9/25/2012 3:27:26 PM

Reviewed By: 09/26/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. 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)

17. 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: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.5	Good	Not Present			

Chain-of-Custody Record

Client: RT Hicks Consultants

Mailing Address: 901 Rio Grande NW
Suite F-142

Phone #: 505 266 5004

email or Fax#: david@rthicksconsult.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name:
FDJ

Project #:

Project Manager:
D Hamilton

Sampler: DH

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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. 1209621	Analysis Request: 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)					Air Bubbles (Y or N)
9-21	14:10	Soil	NPit 35	1-4oz glass jar		-001	X		X	X				X								

Date:	Time:	Relinquished by:	Received by:	Date	Time
9-25	14:42	David Hamilton	Mike Gr	09/25/12	1442
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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

August 10, 2012

David Hamilton

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: Frio OrderNo.: 1206398

Dear David Hamilton:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/8/2012 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued June 21, 2012.

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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1206398**
Date Reported: **8/10/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Frio #1
Project: Frio
Collection Date: 6/6/2012 1:06:00 PM
Lab ID: 1206398-001 **Matrix:** SOIL **Received Date:** 6/8/2012 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	160	10		mg/Kg	1	6/14/2012 7:39:51 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	6/14/2012 7:39:51 AM
Surr: DNOP	120	77.6-140		%REC	1	6/14/2012 7:39:51 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	870	250		mg/Kg	50	6/14/2012 11:09:51 PM
Surr: BFB	112	69.7-121		%REC	50	6/14/2012 11:09:51 PM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	25	2.5		mg/Kg	50	6/14/2012 11:09:51 PM
Toluene	77	2.5		mg/Kg	50	6/14/2012 11:09:51 PM
Ethylbenzene	26	2.5		mg/Kg	50	6/14/2012 11:09:51 PM
Xylenes, Total	57	5.0		mg/Kg	50	6/14/2012 11:09:51 PM
Surr: 4-Bromofluorobenzene	102	80-120		%REC	50	6/14/2012 11:09:51 PM
EPA METHOD 300.0: ANIONS						Analyst: **BRM**
Chloride	72000	3000		mg/Kg	2000	6/19/2012 8:43:36 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033	H	mg/Kg	1	7/12/2012 2:53:50 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Arsenic	ND	2.5		mg/Kg	1	7/18/2012 11:58:04 AM
Barium	24	0.10		mg/Kg	1	7/18/2012 11:58:04 AM
Cadmium	ND	0.10		mg/Kg	1	7/18/2012 11:58:04 AM
Chromium	12	0.30		mg/Kg	1	7/18/2012 11:58:04 AM
Lead	0.66	0.25		mg/Kg	1	7/18/2012 11:58:04 AM
Selenium	ND	2.5		mg/Kg	1	7/18/2012 1:32:17 PM
Silver	ND	0.25		mg/Kg	1	7/18/2012 1:32:17 PM
Uranium	ND	5.0		mg/Kg	1	7/18/2012 11:58:04 AM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: 1206398
Pace Project No.: 3073233

Sample: 1206398-001C Frio #1 **Lab ID: 3073233001** Collected: 06/06/12 13:06 Received: 07/13/12 10:00 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**0.961 ± 0.190 (0.239)**	pCi/g	08/08/12 07:19	13982-63-3	
Radium-228	EPA 901.1m	**1.37 ± 0.347 (0.341)**	pCi/g	08/08/12 07:19	15262-20-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: 1206398
Pace Project No.: 3073233

QC Batch: RADC/12666 Analysis Method: EPA 901.1m
QC Batch Method: EPA 901.1m Analysis Description: 901.1 Gamma Spec
Associated Lab Samples: 3073233001

METHOD BLANK: 465563 Matrix: Solid
Associated Lab Samples: 3073233001

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Radium-226	-0.036 ± 0.223 (0.273)	pCi/g	08/07/12 16:20	
Radium-228	0.0310 ± 0.197 (0.371)	pCi/g	08/07/12 16:20	

REPORT OF LABORATORY ANALYSIS

QC SUMMARY REPORT

WO#: **1206398**

Hall Environmental Analysis Laboratory, Inc.

10-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-2347**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **2347**	RunNo: **3387**
Prep Date: **6/12/2012**	Analysis Date: **6/12/2012**	SeqNo: **94687** Units: **mg/Kg**

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

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206398**

10-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-2345**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **2345**	RunNo: **3354**
Prep Date: **6/12/2012**	Analysis Date: **6/12/2012**	SeqNo: **93882** 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	11		10.00		107	77.6	140			

Sample ID **LCS-2345**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **2345**	RunNo: **3354**
Prep Date: **6/12/2012**	Analysis Date: **6/12/2012**	SeqNo: **93885** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	78.4	52.6	130			
Surr: DNOP	4.2		5.000		84.4	77.6	140			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206398**

10-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-2342**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **2342**	RunNo: **3456**
Prep Date: **6/12/2012**	Analysis Date: **6/14/2012**	SeqNo: **96796** 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	930		1000		92.8	69.7	121			

Sample ID **LCS-2342**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **2342**	RunNo: **3456**
Prep Date: **6/12/2012**	Analysis Date: **6/14/2012**	SeqNo: **96800** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	98.5	133			
Surr: BFB	1000		1000		100	69.7	121			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206398**

10-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-2342**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **2342**	RunNo: **3456**
Prep Date: **6/12/2012**	Analysis Date: **6/14/2012**	SeqNo: **96832** 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	0.96		1.000		96.0	80	120			

Sample ID **LCS-2342**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **2342**	RunNo: **3456**
Prep Date: **6/12/2012**	Analysis Date: **6/14/2012**	SeqNo: **96836** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	102	83.3	107			
Toluene	1.0	0.050	1.000	0	100	74.3	115			
Ethylbenzene	0.97	0.050	1.000	0	96.9	80.9	122			
Xylenes, Total	2.9	0.10	3.000	0	96.9	85.2	123			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	80	120			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206398**

10-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-2781**	SampType: **MBLK**	TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS**	Batch ID: **2781**	RunNo: **3998**
Prep Date: **7/11/2012**	Analysis Date: **7/12/2012**	SeqNo: **114351** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-2781**	SampType: **LCS**	TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS**	Batch ID: **2781**	RunNo: **3998**
Prep Date: **7/11/2012**	Analysis Date: **7/12/2012**	SeqNo: **114352** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	98.3	80	120			

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206398**

10-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID	**MB-2831**	SampType:	**MBLK**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**PBS**	Batch ID:	**2831**		RunNo:	**4117**				
Prep Date:	**7/16/2012**	Analysis Date:	**7/18/2012**		SeqNo:	**117868**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Uranium	ND	5.0								

Sample ID	**LCS-2831**	SampType:	**LCS**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**LCSS**	Batch ID:	**2831**		RunNo:	**4117**				
Prep Date:	**7/16/2012**	Analysis Date:	**7/18/2012**		SeqNo:	**117869**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	25	2.5	25.00	0.5370	98.6	80	120			
Barium	24	0.10	25.00	0	96.5	80	120			
Cadmium	24	0.10	25.00	0	98.0	80	120			
Chromium	24	0.30	25.00	0.1295	96.6	80	120			
Lead	24	0.25	25.00	0	98.0	80	120			
Uranium	25	5.0	25.00	0	98.1	80	120			

Sample ID	**MB-2831**	SampType:	**MBLK**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**PBS**	Batch ID:	**2831**		RunNo:	**4119**				
Prep Date:	**7/16/2012**	Analysis Date:	**7/18/2012**		SeqNo:	**117929**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID	**LCS-2831**	SampType:	**LCS**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**LCSS**	Batch ID:	**2831**		RunNo:	**4119**				
Prep Date:	**7/16/2012**	Analysis Date:	**7/18/2012**		SeqNo:	**117930**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	22	2.5	25.00	0	88.0	80	120			
Silver	5.0	0.25	5.000	0.02000	99.0	80	120			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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
- RL Reporting Detection Limit

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: 1206398

Received by/date: AT 06/08/12

Logged By: Anne Thorne 6/8/2012 4:26:00 PM

Completed By: Anne Thorne 6/11/2012

Reviewed By: AT 06/11/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. 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)

17. 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: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Not Present			

Chain-of-Custody Record

Client: [redacted] Stevens
RT Hicks Consultants

Mailing Address: 901 Rio Grande Blvd NW Frio
Suite F-142, Alb, N.M 87104

Phone #: 266 5004

email or Fax#: david@rthicksconsult.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name:
Frio

Project #:

Project Manager:
D. Hamilton

Sampler: DH

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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 # (06/08/12 HT)	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F^-,Cl^-,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	BTEX				Air Bubbles (Y or N)
6-6-12	13:06	Soil	Frio #1	4oz Glass jar		-001	X		X					X				X				

Date: 6-8-12 Time: 16:26 Relinquished by: David Hamilton
Received by: [signature] Date Time 06/08/12 1624

Date: Time: Relinquished by:
Received by: Date Time

Remarks: Based upon these results call to determine additional analysis
HT 06/08/12

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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

August 27, 2012

David Hamilton

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: Frio OrderNo.: 1207990

Dear David Hamilton:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/23/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Project: Frio
Lab ID: 1207990-001 **Matrix:** SOIL

Client Sample ID: Frio 5 Point Pit Comp
Collection Date: 7/18/2012 2:00:00 PM
Received Date: 7/23/2012 2:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1 MODIFIED: EDB						Analyst: **LRW**
1,2-Dibromoethane	ND	0.099		µg/Kg	1	7/30/2012 1:42:49 PM
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	0.020		mg/Kg	1	8/1/2012 3:18:37 PM
Aroclor 1221	ND	0.020		mg/Kg	1	8/1/2012 3:18:37 PM
Aroclor 1232	ND	0.020		mg/Kg	1	8/1/2012 3:18:37 PM
Aroclor 1242	ND	0.020		mg/Kg	1	8/1/2012 3:18:37 PM
Aroclor 1248	ND	0.020		mg/Kg	1	8/1/2012 3:18:37 PM
Aroclor 1254	ND	0.020		mg/Kg	1	8/1/2012 3:18:37 PM
Aroclor 1260	ND	0.020		mg/Kg	1	8/1/2012 3:18:37 PM
Surr: Decachlorobiphenyl	45.6	20.7-114		%REC	1	8/1/2012 3:18:37 PM
EPA METHOD 8310: PAHS						Analyst: **SCC**
Naphthalene	ND	2.5		mg/Kg	10	8/1/2012 2:18:47 PM
1-Methylnaphthalene	3.0	2.5		mg/Kg	10	8/1/2012 2:18:47 PM
2-Methylnaphthalene	3.0	2.5		mg/Kg	10	8/1/2012 2:18:47 PM
Acenaphthylene	ND	2.5		mg/Kg	10	8/1/2012 2:18:47 PM
Acenaphthene	ND	2.5		mg/Kg	10	8/1/2012 2:18:47 PM
Fluorene	ND	0.30		mg/Kg	10	8/1/2012 2:18:47 PM
Phenanthrene	0.34	0.15		mg/Kg	10	8/1/2012 2:18:47 PM
Anthracene	ND	0.15		mg/Kg	10	8/1/2012 2:18:47 PM
Fluoranthene	ND	0.20		mg/Kg	10	8/1/2012 2:18:47 PM
Pyrene	ND	0.25		mg/Kg	10	8/1/2012 2:18:47 PM
Benz(a)anthracene	ND	0.10		mg/Kg	10	8/1/2012 2:18:47 PM
Chrysene	0.14	0.11		mg/Kg	10	8/1/2012 2:18:47 PM
Benzo(b)fluoranthene	ND	0.10		mg/Kg	10	8/1/2012 2:18:47 PM
Benzo(k)fluoranthene	ND	0.10		mg/Kg	10	8/1/2012 2:18:47 PM
Benzo(a)pyrene	ND	0.10		mg/Kg	10	8/1/2012 2:18:47 PM
Dibenz(a,h)anthracene	ND	0.10		mg/Kg	10	8/1/2012 2:18:47 PM
Benzo(g,h,i)perylene	ND	0.10		mg/Kg	10	8/1/2012 2:18:47 PM
Indeno(1,2,3-cd)pyrene	ND	0.10		mg/Kg	10	8/1/2012 2:18:47 PM
Surr: Benzo(e)pyrene	93.5	35.9-103		%REC	10	8/1/2012 2:18:47 PM
EPA METHOD 300.0: ANIONS						Analyst: **BRM**
Chloride	56000	3000		mg/Kg	2000	7/25/2012 12:13:30 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	23	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Toluene	69	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Ethylbenzene	24	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Methyl tert-butyl ether (MTBE)	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,2,4-Trimethylbenzene	12	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,3,5-Trimethylbenzene	4.2	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,2-Dichloroethane (EDC)	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM

Qualifiers:

- 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
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits
- X Value exceeds Maximum Contaminant Level.

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Frio 5 Point Pit Comp
Project: Frio
Collection Date: 7/18/2012 2:00:00 PM
Lab ID: 1207990-001 **Matrix:** SOIL **Received Date:** 7/23/2012 2:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,2-Dibromoethane (EDB)	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Naphthalene	2.5	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
1-Methylnaphthalene	ND	3.7		mg/Kg	20	7/27/2012 10:12:37 PM
2-Methylnaphthalene	ND	3.7		mg/Kg	20	7/27/2012 10:12:37 PM
Acetone	ND	14		mg/Kg	20	7/27/2012 10:12:37 PM
Bromobenzene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Bromodichloromethane	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Bromoform	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Bromomethane	ND	2.8		mg/Kg	20	7/27/2012 10:12:37 PM
2-Butanone	ND	9.3		mg/Kg	20	7/27/2012 10:12:37 PM
Carbon disulfide	ND	9.3		mg/Kg	20	7/27/2012 10:12:37 PM
Carbon tetrachloride	ND	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
Chlorobenzene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Chloroethane	ND	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
Chloroform	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Chloromethane	ND	2.8		mg/Kg	20	7/27/2012 10:12:37 PM
2-Chlorotoluene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
4-Chlorotoluene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
cis-1,2-DCE	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
cis-1,3-Dichloropropene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,2-Dibromo-3-chloropropane	ND	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
Dibromochloromethane	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Dibromomethane	ND	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
1,2-Dichlorobenzene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,3-Dichlorobenzene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,4-Dichlorobenzene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Dichlorodifluoromethane	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,1-Dichloroethane	ND	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
1,1-Dichloroethene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,2-Dichloropropane	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,3-Dichloropropane	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
2,2-Dichloropropane	ND	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
1,1-Dichloropropene	ND	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
Hexachlorobutadiene	ND	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
2-Hexanone	ND	9.3		mg/Kg	20	7/27/2012 10:12:37 PM
Isopropylbenzene	4.0	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
4-Isopropyltoluene	1.0	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
4-Methyl-2-pentanone	ND	9.3		mg/Kg	20	7/27/2012 10:12:37 PM
Methylene chloride	ND	2.8		mg/Kg	20	7/27/2012 10:12:37 PM
n-Butylbenzene	2.7	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
n-Propylbenzene	5.4	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
sec-Butylbenzene	2.1	0.93		mg/Kg	20	7/27/2012 10:12:37 PM

Qualifiers:
- 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
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits
- X Value exceeds Maximum Contaminant Level.

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Frio 5 Point Pit Comp
Project: Frio
Collection Date: 7/18/2012 2:00:00 PM
Lab ID: 1207990-001 **Matrix:** SOIL **Received Date:** 7/23/2012 2:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Styrene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
tert-Butylbenzene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,1,1,2-Tetrachloroethane	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,1,2,2-Tetrachloroethane	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Tetrachloroethene (PCE)	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
trans-1,2-DCE	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
trans-1,3-Dichloropropene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,2,3-Trichlorobenzene	ND	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
1,2,4-Trichlorobenzene	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,1,1-Trichloroethane	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,1,2-Trichloroethane	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Trichloroethene (TCE)	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Trichlorofluoromethane	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
1,2,3-Trichloropropane	ND	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
Vinyl chloride	ND	0.93		mg/Kg	20	7/27/2012 10:12:37 PM
Xylenes, Total	51	1.9		mg/Kg	20	7/27/2012 10:12:37 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	20	7/27/2012 10:12:37 PM
Surr: 4-Bromofluorobenzene	92.3	70-130		%REC	20	7/27/2012 10:12:37 PM
Surr: Dibromofluoromethane	101	70-130		%REC	20	7/27/2012 10:12:37 PM
Surr: Toluene-d8	101	70-130		%REC	20	7/27/2012 10:12:37 PM

Qualifiers:

- 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
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits
- X Value exceeds Maximum Contaminant Level.

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: 1207990
Pace Project No.: 3074318

Sample: 1207990-001B Frio 5 Point Pit **Lab ID: 3074318001** Collected: 07/18/12 14:00 Received: 07/27/12 10:00 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**1.06 ± 0.292 (0.365)**	pCi/g	08/22/12 14:14	13982-63-3	
Radium-228	EPA 901.1m	**0.718 ± 0.403 (0.647)**	pCi/g	08/22/12 14:14	15262-20-1	

Date: 08/24/2012 03:36 PM

REPORT OF LABORATORY ANALYSIS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: 1207990
Pace Project No.: 3074318

QC Batch: RADC/12798
QC Batch Method: EPA 901.1m
Analysis Method: EPA 901.1m
Analysis Description: 901.1 Gamma Spec
Associated Lab Samples: 3074318001

METHOD BLANK: 471396
Matrix: Solid
Associated Lab Samples: 3074318001

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Radium-226	-0.004 ± 0.631 (1.18)	pCi/g	08/22/12 14:46	
Radium-228	-0.029 ± 0.830 (1.53)	pCi/g	08/22/12 14:46	

Date: 08/24/2012 03:36 PM

REPORT OF LABORATORY ANALYSIS

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1207990**

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID	**MB-3003**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**3003**		RunNo:	**4422**					
Prep Date:	**7/24/2012**	Analysis Date:	**7/25/2012**		SeqNo:	**123128**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	**LCS-3003**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**3003**		RunNo:	**4422**					
Prep Date:	**7/24/2012**	Analysis Date:	**7/25/2012**		SeqNo:	**123129**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	95.3	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1207990**

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3092** SampType: **MBLK** TestCode: **EPA Method 504.1 Modified: EDB**

Client ID: **PBS** Batch ID: **3092** RunNo: **4510**

Prep Date: **7/30/2012** Analysis Date: **7/30/2012** SeqNo: **126420** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	ND	0.10								

Sample ID **LCS-3092** SampType: **LCS** TestCode: **EPA Method 504.1 Modified: EDB**

Client ID: **LCSS** Batch ID: **3092** RunNo: **4510**

Prep Date: **7/30/2012** Analysis Date: **7/30/2012** SeqNo: **126423** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	1.1	0.10	1.000	0	111	70	130			

Sample ID **1207990-001AMS** SampType: **MS** TestCode: **EPA Method 504.1 Modified: EDB**

Client ID: **Frio 5 Point Pit Com** Batch ID: **3092** RunNo: **4510**

Prep Date: **7/30/2012** Analysis Date: **7/30/2012** SeqNo: **126430** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	1.1	0.10	1.009	0	112	70	130			

Sample ID **1207990-001AMSD** SampType: **MSD** TestCode: **EPA Method 504.1 Modified: EDB**

Client ID: **Frio 5 Point Pit Com** Batch ID: **3092** RunNo: **4510**

Prep Date: **7/30/2012** Analysis Date: **7/30/2012** SeqNo: **126431** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	1.1	0.099	0.9943	0	111	70	130	1.70	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1207990**

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3010**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **3010**	RunNo: **4444**
Prep Date: **7/24/2012**	Analysis Date: **7/26/2012**	SeqNo: **124694** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		99.6	84	116			

Sample ID **LCS-3010**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **3010**	RunNo: **4444**
Prep Date: **7/24/2012**	Analysis Date: **7/26/2012**	SeqNo: **124695** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		108	84	116			

Qualifiers:

- 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
- 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#: **1207990**

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3010**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **3010**	RunNo: **4444**
Prep Date: **7/24/2012**	Analysis Date: **7/26/2012**	SeqNo: **124745** 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 **LCS-3010**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **3010**	RunNo: **4444**
Prep Date: **7/24/2012**	Analysis Date: **7/26/2012**	SeqNo: **124746** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		112	80	120			

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1207990**

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3049**	SampType: **MBLK**	TestCode: **EPA Method 8082: PCB's**
Client ID: **PBS**	Batch ID: **3049**	RunNo: **4552**
Prep Date: **7/26/2012**	Analysis Date: **8/1/2012**	SeqNo: **128150** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.020								
Aroclor 1221	ND	0.020								
Aroclor 1232	ND	0.020								
Aroclor 1242	ND	0.020								
Aroclor 1248	ND	0.020								
Aroclor 1254	ND	0.020								
Aroclor 1260	ND	0.020								
Surr: Decachlorobiphenyl	0.055		0.06250		88.0	20.7	114			

Sample ID **LCS-3049**	SampType: **LCS**	TestCode: **EPA Method 8082: PCB's**
Client ID: **LCSS**	Batch ID: **3049**	RunNo: **4552**
Prep Date: **7/26/2012**	Analysis Date: **8/1/2012**	SeqNo: **128151** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1260	0.14	0.020	0.1250	0	109	21.4	118			
Surr: Decachlorobiphenyl	0.048		0.06250		76.8	20.7	114			

Sample ID **1207990-001AMS**	SampType: **MS**	TestCode: **EPA Method 8082: PCB's**
Client ID: **Frio 5 Point Pit Com**	Batch ID: **3049**	RunNo: **4552**
Prep Date: **7/26/2012**	Analysis Date: **8/1/2012**	SeqNo: **128771** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1260	0.052	0.020	0.1243	0	42.1	45	117			S
Surr: Decachlorobiphenyl	0.030		0.06213		48.0	20.7	114			

Sample ID **1207990-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8082: PCB's**
Client ID: **Frio 5 Point Pit Com**	Batch ID: **3049**	RunNo: **4552**
Prep Date: **7/26/2012**	Analysis Date: **8/1/2012**	SeqNo: **128772** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1260	0.047	0.020	0.1256	0	37.0	45	117	11.7	20	S
Surr: Decachlorobiphenyl	0.025		0.06278		40.4	20.7	114	0	0	

Qualifiers:

- 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
- 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#: **1207990**

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **mb-3010**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **3010**	RunNo: **4468**
Prep Date: **7/24/2012**	Analysis Date: **7/25/2012**	SeqNo: **125366** 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								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

Qualifiers:

- 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
- 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#: **1207990**

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **mb-3010** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBS** Batch ID: **3010** RunNo: **4468**

Prep Date: **7/24/2012** Analysis Date: **7/25/2012** SeqNo: **125366** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.0	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

Sample ID **lcs-3010** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSS** Batch ID: **3010** RunNo: **4468**

Prep Date: **7/24/2012** Analysis Date: **7/25/2012** SeqNo: **125367** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.050	1.000	0	98.9	70.7	123			
Toluene	0.97	0.050	1.000	0	96.6	80	120			
Chlorobenzene	0.99	0.050	1.000	0	99.2	70	130			
1,1-Dichloroethene	0.97	0.050	1.000	0	97.4	63.1	148			
Trichloroethene (TCE)	0.86	0.050	1.000	0	85.7	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.2	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			

Qualifiers:

- 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
- 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#: **1207990**

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **lcs-3010**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **3010**	RunNo: **4468**
Prep Date: **7/24/2012**	Analysis Date: **7/25/2012**	SeqNo: **125367** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID **mb-3010**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **3010**	RunNo: **4498**
Prep Date: **7/24/2012**	Analysis Date: **7/27/2012**	SeqNo: **126123** 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								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								

Qualifiers:

- 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
- 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#: **1207990**

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **mb-3010**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **3010**	RunNo: **4498**
Prep Date: **7/24/2012**	Analysis Date: **7/27/2012**	SeqNo: **126123** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.7	70	130			
Surr: 4-Bromofluorobenzene	0.59		0.5000		118	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		99.3	70	130			

Qualifiers:

- 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
- 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#: **1207990**

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **MB-3050**	SampType: **MBLK**	TestCode: **EPA Method 8310: PAHs**
Client ID: **PBS**	Batch ID: **3050**	RunNo: **4559**
Prep Date: **7/26/2012**	Analysis Date: **8/1/2012**	SeqNo: **128155** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.25								
1-Methylnaphthalene	ND	0.25								
2-Methylnaphthalene	ND	0.25								
Acenaphthylene	ND	0.25								
Acenaphthene	ND	0.25								
Fluorene	ND	0.030								
Phenanthrene	ND	0.015								
Anthracene	ND	0.015								
Fluoranthene	ND	0.020								
Pyrene	ND	0.025								
Benz(a)anthracene	ND	0.010								
Chrysene	ND	0.011								
Benzo(b)fluoranthene	ND	0.010								
Benzo(k)fluoranthene	ND	0.010								
Benzo(a)pyrene	ND	0.010								
Dibenz(a,h)anthracene	ND	0.010								
Benzo(g,h,i)perylene	ND	0.010								
Indeno(1,2,3-cd)pyrene	ND	0.010								
Surr: Benzo(e)pyrene	0.32		0.5000		63.9	35.9	103			

Sample ID **LCS-3050**	SampType: **LCS**	TestCode: **EPA Method 8310: PAHs**
Client ID: **LCSS**	Batch ID: **3050**	RunNo: **4559**
Prep Date: **7/26/2012**	Analysis Date: **8/1/2012**	SeqNo: **128157** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.3	0.25	2.000	0	66.4	32.4	87			
1-Methylnaphthalene	1.4	0.25	2.000	0	67.8	36.9	86.9			
2-Methylnaphthalene	1.4	0.25	2.000	0	68.9	34.4	87.4			
Acenaphthylene	1.4	0.25	2.000	0	70.8	38.9	84.7			
Acenaphthene	1.5	0.25	2.000	0	74.1	41.7	83.4			
Fluorene	0.11	0.030	0.2000	0	56.5	27.8	72.5			
Phenanthrene	0.060	0.015	0.1006	0	59.9	31.9	79.1			
Anthracene	0.065	0.015	0.1006	0	64.6	38.8	81.2			
Fluoranthene	0.12	0.020	0.2006	0	61.2	40.9	86			
Pyrene	0.13	0.025	0.2000	0	63.0	21.4	90.4			
Benz(a)anthracene	0.016	0.010	0.02000	0	77.5	40.9	92.3			
Chrysene	0.070	0.011	0.1006	0	69.1	35.3	86.6			
Benzo(b)fluoranthene	0.021	0.010	0.02500	0	85.0	42.9	98.1			
Benzo(k)fluoranthene	ND	0.010	0.01250	0	78.0	50.6	99			
Benzo(a)pyrene	ND	0.010	0.01250	0	78.0	39.4	105			
Dibenz(a,h)anthracene	0.019	0.010	0.02500	0	77.0	40.5	100			

Qualifiers:

- 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
- 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#: **1207990**

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **LCS-3050**	SampType: **LCS**	TestCode: **EPA Method 8310: PAHs**
Client ID: **LCSS**	Batch ID: **3050**	RunNo: **4559**
Prep Date: **7/26/2012**	Analysis Date: **8/1/2012**	SeqNo: **128157** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(g,h,i)perylene	0.019	0.010	0.02500	0	77.0	39.4	90.3			
Indeno(1,2,3-cd)pyrene	0.036	0.010	0.05002	0	71.5	39.3	94.7			
Surr: Benzo(e)pyrene	0.41		0.5000		82.8	35.9	103			

Sample ID **LCSD-3050**	SampType: **LCSD**	TestCode: **EPA Method 8310: PAHs**
Client ID: **LCSS02**	Batch ID: **3050**	RunNo: **4559**
Prep Date: **7/26/2012**	Analysis Date: **8/1/2012**	SeqNo: **128217** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.4	0.25	2.000	0	67.7	32.4	87	1.88	20	
1-Methylnaphthalene	1.4	0.25	2.000	0	68.0	36.9	86.9	0.350	20	
2-Methylnaphthalene	1.4	0.25	2.000	0	68.4	34.4	87.4	0.692	20	
Acenaphthylene	1.4	0.25	2.000	0	71.8	38.9	84.7	1.32	20	
Acenaphthene	1.5	0.25	2.000	0	73.1	41.7	83.4	1.34	20	
Fluorene	0.11	0.030	0.2000	0	57.1	27.8	72.5	1.10	20	
Phenanthrene	0.062	0.015	0.1006	0	61.9	31.9	79.1	3.27	20	
Anthracene	0.065	0.015	0.1006	0	64.6	38.8	81.2	0	20	
Fluoranthene	0.13	0.020	0.2006	0	62.6	40.9	86	2.22	20	
Pyrene	0.13	0.025	0.2000	0	62.6	21.4	90.4	0.597	20	
Benz(a)anthracene	0.016	0.010	0.02000	0	78.8	40.9	92.3	1.60	20	
Chrysene	0.070	0.011	0.1006	0	69.6	35.3	86.6	0.717	20	
Benzo(b)fluoranthene	0.022	0.010	0.02500	0	90.0	42.9	98.1	5.71	20	
Benzo(k)fluoranthene	0.010	0.010	0.01250	0	82.0	50.6	99	5.00	20	
Benzo(a)pyrene	ND	0.010	0.01250	0	78.0	39.4	105	0	20	
Dibenz(a,h)anthracene	0.019	0.010	0.02500	0	77.0	40.5	100	0	20	
Benzo(g,h,i)perylene	0.019	0.010	0.02500	0	77.0	39.4	90.3	0	20	
Indeno(1,2,3-cd)pyrene	0.036	0.010	0.05002	0	71.0	39.3	94.7	0.702	20	
Surr: Benzo(e)pyrene	0.43		0.5000		85.3	35.9	103	0		

Qualifiers:

- 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
- 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 8710
TEL: 505-345-3975 FAX: 505-345-410
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RT HICKS Work Order Number: 1207990

Received by/date: KG 07/23/12

Logged By: **Lindsay Mangin** 7/23/2012 2:01:00 PM

Completed By: **Lindsay Mangin** 7/24/2012 9:49:22 AM

Reviewed By: IO 07/24/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ☑	No ☐	NA ☐
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. 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)

17. 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: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.8	Good	Not Present			

Chain-of-Custody Record

Client: RT Hicks Consultants

Mailing Address: 901 Rio Grande Blvd NW Suite F-142 Alb., N.M. 87104

Phone #: 505 266 5004

email or Fax#: david@rthicksconsult.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Frio

Project #:

Project Manager: David Hamilton

Sampler: DH

On Ice: No

Sample Temperature: 5.0

HEAL No. 1207990

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
7-18-12	14:00	soil	Frio 5 point pit comp	2 4oz glass jars	Cold	-001

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

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)	x See attached list				Air Bubbles (Y or N)
			X				X				X				
							07/20/12								

Date	Time	Relinquished by:	Received by:	Date	Time
7-20-12	14:05	David Hamilton		07/20/12	1401
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Client does not want 4/8 ~~NO~~ OR Cl. See attached. per David 07/23/12

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

contaminants in the ground water which still allow for the present and future use of ground water resources.

C. The standards are not intended as maximum ranges and concentrations for use, and nothing herein contained shall be construed as limiting the use of waters containing higher ranges and concentrations.

[2-18-77; 20.6.2.3101 NMAC - Rn, 20 NMAC 6.2.III.3101, 1-15-01]

20.6.2.3102: [RESERVED]

[12-1-95; 20.6.2.3102 NMAC - Rn, 20 NMAC 6.2.III.3102, 1-15-01]

20.6.2.3103 STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS: The following standards are the allowable pH range and the maximum allowable concentration in ground water for the contaminants specified unless the existing condition exceeds the standard or unless otherwise provided in Subsection D of Section 20.6.2.3109 NMAC. Regardless of whether there is one contaminant or more than one contaminant present in ground water, when an existing pH or concentration of any water contaminant exceeds the standard specified in Subsection A, B, or C of this section, the existing pH or concentration shall be the allowable limit, provided that the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this section. These standards shall apply to the dissolved portion of the contaminants specified with a definition of dissolved being that given in the publication "*methods for chemical analysis of water and waste of the U.S. environmental protection agency*," with the exception that standards for mercury, organic compounds and non-aqueous phase liquids shall apply to the total unfiltered concentrations of the contaminants.

A. **Human Health Standards**-Ground water shall meet the standards of Subsection A and B of this section unless otherwise provided. If more than one water contaminant affecting human health is present, the toxic pollutant criteria as set forth in the definition of toxic pollutant in Section 20.6.2.1101 NMAC for the combination of contaminants, or the Human Health Standard of Subsection A of Section 20.6.2.3103 NMAC for each contaminant shall apply, whichever is more stringent. Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be reasonably measured.

(1) Arsenic (As).....0.1 mg/l
(2) Barium (Ba).....1.0 mg/l
(3) Cadmium (Cd).....0.01 mg/l
(4) Chromium (Cr).....0.05 mg/l
(5) Cyanide (CN).....0.2 mg/l
(6) Fluoride (F).....1.6 mg/l
(7) Lead (Pb).....0.05 mg/l
(8) Total Mercury (Hg).....0.002 mg/l
(9) Nitrate (NO_3 as N).....10.0 mg/l
(10) Selenium (Se).....0.05 mg/l
(11) Silver (Ag).....0.05 mg/l
(12) Uranium (U).....0.03 mg/l
(13) Radioactivity: Combined Radium-226 & Radium-228.....30 pCi/l
(14) Benzene.....0.01 mg/l
(15) Polychlorinated biphenyls (PCB's).....0.001 mg/l
(16) Toluene.....0.75 mg/l
(17) Carbon Tetrachloride.....0.01 mg/l
(18) 1,2-dichloroethane (EDC).....0.01 mg/l
(19) 1,1-dichloroethylene (1,1-DCE).....0.005 mg/l
(20) 1,1,2,2-tetrachloroethylene (PCE).....0.02 mg/l
(21) 1,1,2-trichloroethylene (TCE).....0.1 mg/l
(22) ethylbenzene.....0.75 mg/l
(23) total xylenes.....0.62 mg/l
(24) methylene chloride.....0.1 mg/l
(25) chloroform.....0.1 mg/l
(26) 1,1-dichloroethane.....0.025 mg/l
(27) ethylene dibromide (EDB).....0.0001 mg/l
(28) 1,1,1-trichloroethane.....0.06 mg/l
(29) 1,1,2-trichloroethane.....0.01 mg/l
(30) 1,1,2,2-tetrachloroethane.....0.01 mg/l
(31) vinyl chloride.....0.001 mg/l
(32) PAHs: total naphthalene plus monomethylnaphthalenes.....0.03 mg/l
(33) benzo-a-pyrene.....0.0007 mg/l

B. **Other Standards for Domestic Water Supply**

(1) Chloride (Cl).....250.0 mg/l

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

October 12, 2012

David Hamilton
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: Frio OrderNo.: 1209B54

Dear David Hamilton:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/25/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1209B54**
Date Reported: **10/12/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Cuttings 31
Project: Frio
Collection Date: 9/21/2012 2:26:00 PM
Lab ID: 1209B54-001 **Matrix:** SOIL **Received Date:** 9/25/2012 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SPLP METALS						Analyst: **JLF**
Chromium	ND	5.0		mg/L	1	10/5/2012 5:10:00 PM
VOLATILES BY 8260B/1312						Analyst: **RAA**
1-Methylnaphthalene	40	20		µg/L	5	10/4/2012 2:14:19 PM
2-Methylnaphthalene	44	20		µg/L	5	10/4/2012 2:14:19 PM
Ethylbenzene	91	5.0		µg/L	5	10/4/2012 2:14:19 PM
Naphthalene	35	10		µg/L	5	10/4/2012 2:14:19 PM
Toluene	120	5.0		µg/L	5	10/4/2012 2:14:19 PM
Xylenes, Total	250	7.5		µg/L	5	10/4/2012 2:14:19 PM
Benzene	5.1	5.0		µg/L	5	10/4/2012 2:14:19 PM
Surr: 1,2-Dichloroethane-d4	87.2	69.9-130		%REC	5	10/4/2012 2:14:19 PM
Surr: 4-Bromofluorobenzene	81.2	71.2-123		%REC	5	10/4/2012 2:14:19 PM
Surr: Dibromofluoromethane	105	73.9-134		%REC	5	10/4/2012 2:14:19 PM
Surr: Toluene-d8	81.2	81.9-122	S	%REC	5	10/4/2012 2:14:19 PM

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
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#: **1209B54**

12-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **mb-4029 vessel #6**	SampType: **MBLK**	TestCode: **Volatiles by 8260B/1312**
Client ID: **PBS**	Batch ID: **4029**	RunNo: **5995**
Prep Date: **10/1/2012**	Analysis Date: **10/4/2012**	SeqNo: **172885** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Ethylbenzene	ND	1.0								
Naphthalene	ND	2.0								
Toluene	1.1	1.0								
Xylenes, Total	2.9	1.5								
Benzene	ND	1.0								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.3	69.9	130			
Surr: 4-Bromofluorobenzene	8.5		10.00		84.8	71.2	123			
Surr: Dibromofluoromethane	8.9		10.00		89.1	73.9	134			
Surr: Toluene-d8	8.2		10.00		82.3	81.9	122			

Sample ID **lcs-4029**	SampType: **LCS**	TestCode: **Volatiles by 8260B/1312**
Client ID: **LCSS**	Batch ID: **4029**	RunNo: **5995**
Prep Date: **10/1/2012**	Analysis Date: **10/4/2012**	SeqNo: **172886** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	21	1.0	20.00	0	103	70	130			B
Benzene	21	1.0	20.00	0	103	51.1	171			
Surr: 1,2-Dichloroethane-d4	8.7		10.00		87.0	69.9	130			
Surr: 4-Bromofluorobenzene	8.5		10.00		84.6	71.2	123			
Surr: Dibromofluoromethane	10		10.00		101	73.9	134			
Surr: Toluene-d8	8.2		10.00		82.3	81.9	122			

Sample ID **1209b54-001ams**	SampType: **MS**	TestCode: **Volatiles by 8260B/1312**
Client ID: **Cuttings 31**	Batch ID: **4029**	RunNo: **5995**
Prep Date: **10/1/2012**	Analysis Date: **10/4/2012**	SeqNo: **172887** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	200	5.0	100.0	120.4	82.9	70	130			
Benzene	100	5.0	100.0	5.136	99.6	51.1	171			
Surr: 1,2-Dichloroethane-d4	43		50.00		86.0	69.9	130			
Surr: 4-Bromofluorobenzene	39		50.00		77.9	71.2	123			
Surr: Dibromofluoromethane	49		50.00		98.2	73.9	134			
Surr: Toluene-d8	39		50.00		78.4	81.9	122			S

Sample ID **1209b54-001amsd**	SampType: **MSD**	TestCode: **Volatiles by 8260B/1312**
Client ID: **Cuttings 31**	Batch ID: **4029**	RunNo: **5995**
Prep Date: **10/1/2012**	Analysis Date: **10/4/2012**	SeqNo: **172888** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	200	5.0	100.0	120.4	80.0	70	130	1.43	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B54**

12-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **1209b54-001amsd** SampType: **MSD** TestCode: **Volatiles by 8260B/1312**

Client ID: **Cuttings 31** Batch ID: **4029** RunNo: **5995**

Prep Date: **10/1/2012** Analysis Date: **10/4/2012** SeqNo: **172888** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	100	5.0	100.0	5.136	96.0	51.1	171	3.52	0	
Surr: 1,2-Dichloroethane-d4	43		50.00		86.5	69.9	130	0	0	
Surr: 4-Bromofluorobenzene	39		50.00		78.2	71.2	123	0	0	
Surr: Dibromofluoromethane	48		50.00		95.6	73.9	134	0	0	
Surr: Toluene-d8	40		50.00		80.7	81.9	122	0	0	S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B54**

12-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID	**MB-4104 (SPLP)**	SampType: **MBLK**			TestCode: **EPA Method 6010B: SPLP Metals**					
Client ID:	**PBW**	Batch ID: **4104**			RunNo: **6088**					
Prep Date:		Analysis Date: **10/9/2012**			SeqNo: **175671**	Units: **mg/L**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	5.0								

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B54**

12-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID	**MB-4104**	SampType:	**MBLK**		TestCode:	**EPA Method 6010B: TCLP Metals**					
Client ID:	**PBW**	Batch ID:	**4104**		RunNo:	**6032**					
Prep Date:	**10/4/2012**	Analysis Date:	**10/5/2012**		SeqNo:	**173813**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium		ND	5.0								

Sample ID	**LCS-4104**	SampType:	**LCS**		TestCode:	**EPA Method 6010B: TCLP Metals**					
Client ID:	**LCSW**	Batch ID:	**4104**		RunNo:	**6032**					
Prep Date:	**10/4/2012**	Analysis Date:	**10/5/2012**		SeqNo:	**173814**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium		ND	5.0	0.5000	0	87.0	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD 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: 1209B54

Received by/date: MG 9/25/12

Logged By: **Anne Thorne** 9/25/2012 2:50:00 PM Anne Thorne

Completed By: **Anne Thorne** 9/26/2012 Anne Thorne

Reviewed By: AT 09/25/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ☑	No ☐	NA ☐
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. 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)

17. 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: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.5	Good	Not Present			

Chain-of-Custody Record

Client: RT Hicks Consultants

Mailing Address: 901 Rio Grande NW Suite F-142 Alb, N.M 87104

Phone #:

email or Fax#: david@rthicksconsult.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Frio

Project #:

Project Manager: D Hamilton

Sampler: DH

On Ice: ☐ Yes ☐ No

Sample Temperature: 4.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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. 1209354001
9-21	14:26	Soil	Cuttings 31	1-4oz glass jar		

Analysis Request

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)	SPLP 1312	Cr, Benzene, Toluene	Ethylbenzene, Total Xylenes	Total Naphthalene, monomethyl... thalenes	Air Bubbles (Y or N)
											X	X	X	X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
9-25	14:50	David Hamilton	Mike Gan	09/25/12	1450
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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

November 01, 2012

David Hamilton
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: Read & Stevens Frio OrderNo.: 1210C59

Dear David Hamilton:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/26/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1210C59**
Date Reported: **11/1/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Frio #1 Cuttings
Project: Read & Stevens Frio
Collection Date: 10/23/2012 1:34:00 PM
Lab ID: 1210C59-001
Matrix: SOIL
Received Date: 10/26/2012 3:42:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Naphthalene	ND	0.096		mg/Kg	1	10/30/2012 8:35:27 PM
1-Methylnaphthalene	ND	0.19		mg/Kg	1	10/30/2012 8:35:27 PM
2-Methylnaphthalene	ND	0.19		mg/Kg	1	10/30/2012 8:35:27 PM
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%REC	1	10/30/2012 8:35:27 PM
Surr: 4-Bromofluorobenzene	73.5	70-130		%REC	1	10/30/2012 8:35:27 PM
Surr: Dibromofluoromethane	92.0	70-130		%REC	1	10/30/2012 8:35:27 PM
Surr: Toluene-d8	97.6	70-130		%REC	1	10/30/2012 8:35:27 PM

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
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#: **1210C59**

01-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: Read & Stevens Frio

Sample ID **mb-4560**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **4560**	RunNo: **6572**
Prep Date: **10/29/2012**	Analysis Date: **10/30/2012**	SeqNo: **190209** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.5	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		93.0	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		88.9	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID **lcs-4560**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **4560**	RunNo: **6572**
Prep Date: **10/29/2012**	Analysis Date: **10/30/2012**	SeqNo: **190210** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		89.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		99.0	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		91.3	70	130			
Surr: Toluene-d8	0.46		0.5000		92.8	70	130			

Qualifiers:

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

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: 1210C59

Received by/date: MG 10/26/12

Logged By: Michelle Garcia 10/26/2012 3:42:00 PM Michelle Garcia

Completed By: Michelle Garcia 10/29/2012 8:48:10 AM Michelle Garcia

Reviewed By: 10/29/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐

Not Required

5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐

Not required. Temp 8.9

7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. 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)

17. 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: _____

18. Additional remarks:

19. **Cooler Information**

Chain-of-Custody Record

Client: RT Hicks Consultants

Mailing Address: 901 Rio Grande Blvd NW Suite F-142 Alb., NM. 87104

Phone #: 505 266 5004

email or Fax#: davidr@rthicksconsult.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Read and Stevens Frio

Project #:

Project Manager: D Hamilton

Sampler: DH

On Ice: ☐ Yes ☐ No

Sample Temperature: 3.7

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210659
10-23	13:34	soil	Frio #1 cuttings	4oz glass		-001

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

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)				Air Bubbles (Y or N)
										X	Naphthalene and 1-methylnaphthalene			

8260

Date:	Time:	Relinquished by:	Received by:	Date	Time
10-26	15:42	David Hamilton	Mindy Jin	10/26/12	1542
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on [illegible]

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

November 20, 2012

David Hamilton

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: Frio OrderNo.: 1211105

Dear David Hamilton:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/2/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1211105**
Date Reported: **11/20/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Frio Cuttings
Project: Frio
Collection Date: 11/2/2012 10:15:00 AM
Lab ID: 1211105-001
Matrix: SOIL
Received Date: 11/2/2012 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	2.1	0.30		mg/Kg	1	11/9/2012 7:03:43 AM
Nitrogen, Nitrate (As N)	7.7	0.30		mg/Kg	1	11/9/2012 7:03:43 AM

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	121106043
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1211105
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	121106043-001	**Sampling Date**	11/2/2012	**Date/Time Received**	11/6/2012 11:50 A
Client Sample ID	1211105-001B / FRIO CUTTINGS			**Sampling Time**	10:15 AM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	11/16/2012	CRW	EPA 335.4	
%moisture	6.1	Percent		11/13/2012	CRW	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211105**

20-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID **1211105-001AMS**	SampType: **MS**			TestCode: **EPA Method 300.0: Anions**					
Client ID: **Frio Cuttings**	Batch ID: **4759**			RunNo: **6819**					
Prep Date: **11/9/2012**	Analysis Date: **11/9/2012**			SeqNo: **198007**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	2.5	0.30	1.500	2.122	27.4	18.1	130			
Nitrogen, Nitrate (As N)	15	0.30	7.500	7.657	99.1	80.1	108			

Sample ID **1211105-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 300.0: Anions**					
Client ID: **Frio Cuttings**	Batch ID: **4759**			RunNo: **6819**					
Prep Date: **11/9/2012**	Analysis Date: **11/9/2012**			SeqNo: **198008**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	2.5	0.30	1.500	2.122	23.1	18.1	130	2.56	20	
Nitrogen, Nitrate (As N)	15	0.30	7.500	7.657	100	80.1	108	0.559	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD 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: 1211105

Received by/date: 11/02/12

Logged By: Lindsay Mangin 11/2/2012 4:05:00 PM

Completed By: Lindsay Mangin 11/2/2012 4:13:27 PM

Reviewed By: IO 11/05/2012

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐

Samples were collected the same day and chilled.

7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. 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)

17. 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: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	9.9	Good	Not Present			

Chain-of-Custody Record

Client: AT Hicks Consultants

Mailing Address: 901 Rio Grande NW Suite F-142 Alb. NM 87104

Phone #: 505 266 5004

email or Fax#: david@athicksconsult.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Frio

Project #:

Project Manager: D Hamilton

Sampler: D.H

On Ice: ☒ Yes ☐ No

Sample Temperature: 0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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. 1211C5
~~11-2~~		~~Soil~~				
11-2	10:15	Soil	Frio Cuttings	2-4oz glass	-	-001

Analysis Request

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,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Organics				Air Bubbles (Y or N)
							X				X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
11-2	16:06	David Hamilton			
Date:	Time:	Relinquished by:	Received by:	Date	Time
				11/02/12	1605

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.