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	Attachment 5
for on-site closure)	
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 revegetation 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

6

Expected Delivery By: Register / Sign In **Business Solutions** Search USPS.com or Track Packages Certified Mail Return Receipt July 19, 2012 FEATURES ALBUQUERQUE, NM 87107 ALBUQUERQUE, NM 87107 SAN JON, NM 88434 SAN JON, NM 88434 Shop LOCATION Manage Your Mail July 18, 2012, 11:11 am July 18, 2012, 7:49 am July 17, 2012, 5:27 pm July 17, 2012, 4:32 pm DATE & TIME STATUS OF YOUR ITEM Send Mail Dispatched to Sort Arrival at Unit Acceptance Delivered Facility Ship a Package First-Class Mail® **USPS Mobile** SERVICE Track & Confirm What's your label (or receipt) number? Customer Service **USPS.COM** Check on Another Item 70113500000055171022 YOUR LABEL NUMBER GET EMAIL UPDATES Quick Tools English

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SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
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 malipiece, or on the front if space permits. 1. Article Addressed to: JAMES SLUTZ 1701 B QUAY RD SO	A. Signature X
SAN-JON, NIM 88434	3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandise C.O.D.
	4. Restricted Delivery? (Extra Fee) ☐ Yes
2. Article Number (Transfer from service label) 7 1 1.1.	3500 0000 5517 1022
PS Form 3811, February 2004 Domestic Ret	urn Receipt 102595-02-M-1540

§ 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:

§ Ş

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):

34.974399° Latitude 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 <u>Robert Frost</u> with an address of 1710- A Quay Rd.50, San Jon, NM 88434____.

For additional information, contact:

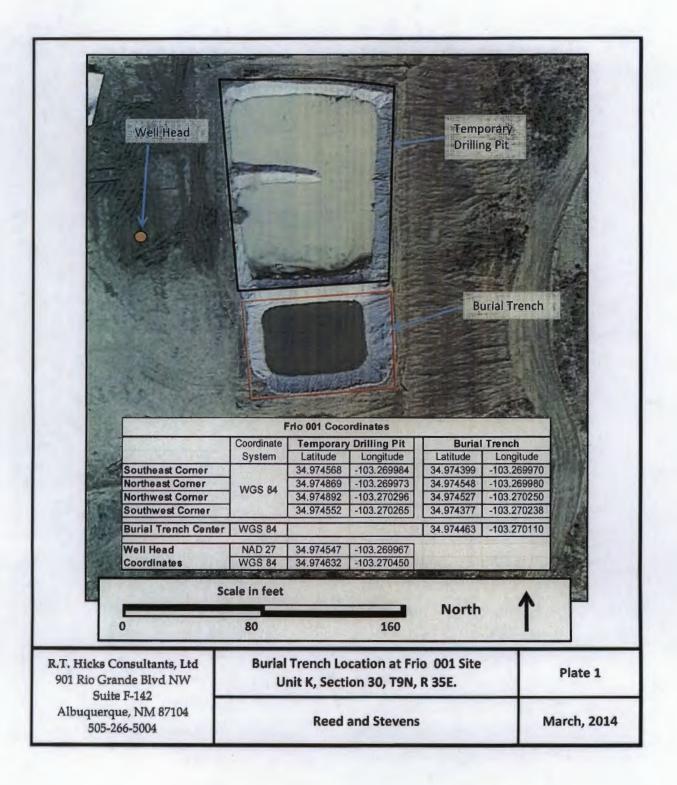
expressed.

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: Paul Hamillen
Name: Dayd Homitton
Title: Agent for Read & Stevens Inc.
STATE OF NEW MEXICO
(Luay) COUNTY
BEFORE ME, on this the $\frac{19^{\frac{th}{t}}}{(date)}$ day of $\frac{\text{June}}{(\text{month and year})}$, personally
BEFORE ME, on this the 19th day of June, 2014, personally appeared David Hamilton, Agent, of Read + Stevens INC.
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

GIVEN UNDER MY HAND	AND SEAL OF OFFICE,	this the 19th day of
1 201/	Notary Public in and for the County of Quay My Commission Expires:	ne State of New Mexico, 787



Submit To Appropri Two Copies District 1 1625 N. French Dr., District II 811 S. First St., Arto District III	Er	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division					Form C-105 Revised August 1, 2011 1. WELL API NO. 30-037-20086								
1000 Rio Brazos Rd <u>District IV</u> 1220 S. St. Francis				1220 South St. Francis Dr. Santa Fe, NM 87505					2. Type of Le STAT 3. State Oil &	re [☑ FEE		ED/IND	IAN	
WELL C		ETION	OR REC	OMPL	ETION REF	POF	RT ANI	LOG		5. Lease Name	e or Uni	t Agree	ment Na	ame	
☐ COMPLETI	URE AT	TACHMEN'	Γ (Fill in box	ces #1 thi	rough #9, #15 Dat	te Rig	Released		d/or	6. Well Numb					
7. Type of Comp NEW V 8. Name of Opera Read and Stevens	VELL _] WORKOVI	ER 🗌 DEEF	PENING	□PLUGBACK		DIFFERE:	NT RESER	VOIR	OTHER 9. OGRID 1	8917			· ·	
10. Address of Op										11. Pool name	or Wild	cat			
12.Location Surface:	Unit Ltr	Section	Town	ıship	Range	Lot		Feet from	the	N/S Line	Feet fr	om the	E/W L	_ine	County
BH:															
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18. Total Measure	d Depth o	of Well	19.	Plug Bac	ck Measured Dep	th	20.	. Was Direc	tiona	l Survey Made?	2	21. Typ	e Electri	ic and Ot	ther Logs Run
22. Producing Inte	erval(s), o	f this complet	ion - Top, Bo	ottom, Na	ame										
23.				CAS	SING RECO	ORI			ring						
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28.						PR(DDUC'	TION							
Date First Product	ion	Pı	oduction Me	thod (Flo	owing, gas lift, pu	mpin	g - Size an	d type pump)	Well Status	(Prod. e	or Shut-	in)		
Date of Test	Hours	Tested	Choke Size	e	Prod'n For Test Period		Oil - Bb	1	Gas	s - MCF	Wate	er - Bbl.		Gas - C	Oil Ratio
Flow Tubing Press.		Pressure	Calculated Hour Rate		Oil - Bbl.		Gas	- MCF	-	Water - Bbl.		Oil Gra	vity - Al	PI - (Cor	r.)
29. Disposition of	Gas (Sola	l, used for fue	l, vented, etc.)			-				30. Tes	t Witne	ssed By		,
31. List Attachmen	nts														
32. If a temporary	pit was us	sed at the wel	l, attach a pla	t with th	e location of the t	empo	rary pit.	See Plate 1							
33. If an on-site bu	irial was t	ised at the we	ll, report the	exact loc	cation of the on-si	te bui	rial:	See Plate 1							
I hand-	Center of	Burial trench	(in WGS 84)):	Latitude :	34.97	4463	Long	gitude	-103.270110	0 ,	,	NAD I	1927 198	33
I hereby certify Signature	that the	e informati	on shown]	<i>h sides of this j</i> Printed Name	jorm	is true	and comp Tit		to the best of	' my kr	iowled	ige and	d belief Date	
					- · 			111						200	
E-mail Addres	S														

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

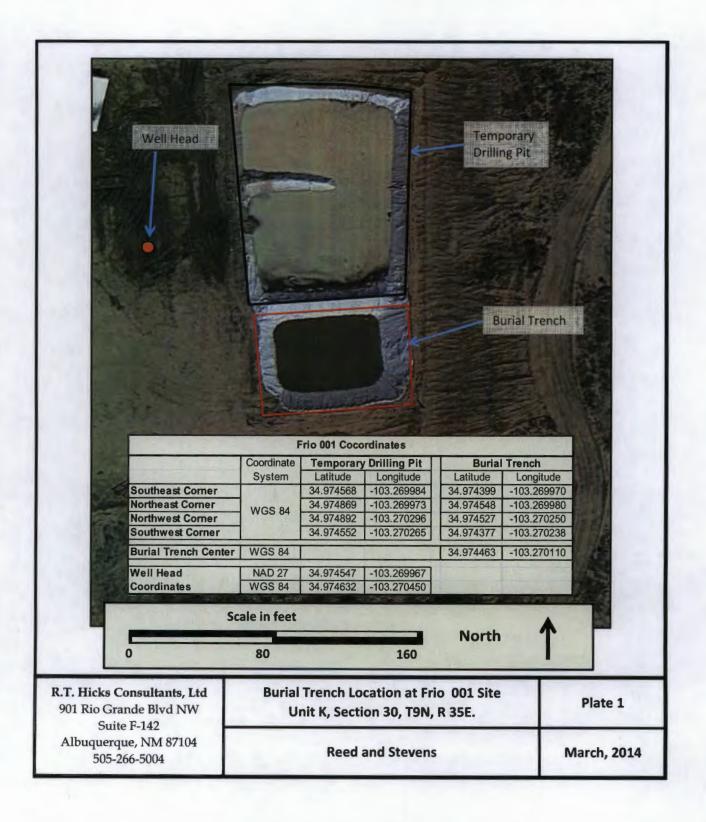
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T. Anhy	T. Canyon_	T. Ojo Alamo	T. Penn A"
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville
T. Queen	T. Silurian	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
	to		
		WATER SANDS	
Include data on rate of v	vater inflow and elevation to which water	er rose in hole.	
No. 1, from	to	feet	
	to		
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	LITHOLOGY RECORD		

Thickness

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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
		n	ng/kg	
	Benzene	ND	0.048	0.2
	Toluene	ND	0.048	
	Ethylbenzene	ND	0.048	
	Total Xylenes	ND	0.096	
Sept. 21	Total BTEX	< 0.240	0.240	50
3ept. 21	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	1000

The Laboratory reports are in Appendix A.

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

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- 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

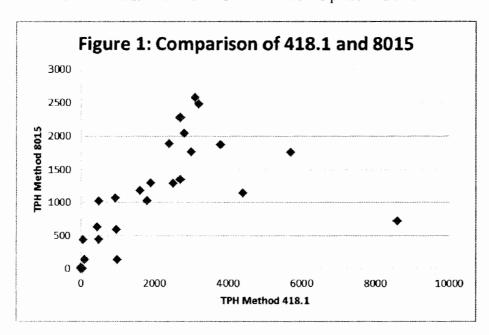


Figure 1 presents laboratory results of 24 samples from drilling pit solids in southeast New Mexico – some are un-stabilized solids and some are stabilized by adding 3 parts clean soil. All results are from Hall Environmental Laboratories. While the entire study included 51 samples, Figure 1 shows only 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.

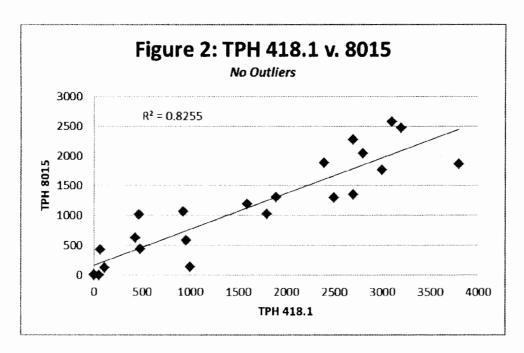


Figure 2 uses the same data as Figure 1 but eliminates the three outliers. The elimination of the outliers provides an excellent correlation coefficient, especially considering these are heterogeneous sludge/soil-like samples. A TPH 8015 result greater than 1500 mg/kg is likely to exceed the 2500 mg/kg 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/k	g]			[mg/kg]
TOU (Come of DOO MADO COO)	1020	211			3500
TPH (Sum of DRO, MRO, GRO)	1030	311	[mal	1	2500 [mg/L]
Chlorida	[mg/k	3000	[mg/	150.0	3000
Chloride	72000		3600.0	150.0	3000
Florade	[mg/k	gj	0.000	0.000	16
Fluoride	ND	0.000	0.000	0.000	1.6
Mercury	ND	0.033	ND 0.000	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/k	g	[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/k	g			
Ethylene dibromide (EDB)	-3/				0.0001
, , , , , , , , , , , , , , , , , , , ,	mg/k	g			5.0001
1,1,1 - trichloroethane					0.06
1,1,2 - trichloroethane					0.01
1,1,2,2 - tetrachloroethane					0.01
Vinyl chloride					0.001
	12.				
(PAH's) total napththalene plus monomethylnaphthalenes					0.03
nonometriyinapiitulaleries	- n				0.05
Panza a numana	mg/k	6			0.0007
Benzo-a-pyrene					0.0007

@200 R.T. HOUS COLUMN WS, LTD. 3/24/2014

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	g/kg]			[mg/kg]
TPH					2500
	[mg	g/kg]	[mg/	L	[mg/L]
Chloride	56000	3000	2800.0	150.0	3000
et	Įm	g/L]			16
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
	p(CI/L			
Radium 226					
Radium 228					pCi/L
Radioactivity					30
		/kg	[mg/		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
February 11 (FRR)		/kg		0.00000107	0.0004
Ethylene dibromide (EDB)	ND ma	0.10		0.00000495	0,0001
1,1,1 - trichloroethane	ND 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 napththalene plus					
monomethylnaphthalenes	3	2.50	0.15	0.125	0.03
	mg	g/kg			
Benzo-a-pyrene	ND	0.10		0.005	0.0007

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 Umit 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/l	(g)			[mg/kg]
TPH (Sum of DRO, MRO, GRO)					2500
	[mg/l	(g)	[mg/	L)	[mg/L]
Chloride					3000
	[mg/l	(g)	[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/	LJ	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	4				
Chloroform	-				
1,1 - dichloroethane					
Ethylene dibromide (EDB)					
1,1,1 - trichloroethane					
1,1,2 - trichloroethane					
1,1,2,2 - tetrachloroethane					
Vinyl chloride					
(DAIN) And I would be	ug/	-	[mg/	-)	
(PAH's) total napththalene plus monomethylnaphthalenes	75	20.00	0.075	0.02	0.03
	mg/k	g			
Benzo-a-pyrene					

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/l	kg]			[mg/kg]
TPH (Sum of DRO, MRO, GRO)				<u> </u>	2500
	[mg/l	kg]	[mg/	<u> </u>	[mg/L]
Chloride				<u> </u>	3000
5	[mg/l	(g]	[mg/	LJ	
Fluoride				L	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	1		
Radium 226			1		
Radium 228					pCi/L
Radioactivity					30
	ug/		[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
51.	ug/k	g			
Ethylene dibromide (EDB)					0.0001
	mg/l	(g			
1,1,1 - trichloroethane					0.06
1,1,2 - trichloroethane	+				0.01
1,1,2,2 - tetrachloroethane	+				0.01
Vinyl chloride					0.001
(0.01)	mg/l	(g	[mg/	L]	
(PAH's) total napththalene plus					
monomethylnaphthalenes	ND 1	0.29	<.0.014	0.014	0.03
	mg/l	g			
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/l	(g)	4		[mg/kg]
TOU (See of DDG AMDG CDG)					2500
TPH (Sum of DRO, MRO, GRO)	[ma/i	(a)	[mg/		2500 [mg/L]
Chloride	[mg/i	(R)	Img/	<u> </u>	3000
Cilibride	[mg/l		[mg/	11	3000
Fluoride	2.1	0.3	0.105	0.015	1.6
Mercury	2.1	0.5	0.103	0.013	0.002
Cyanide	ND	0.3		0.015	0.02
Nitrate (NO3 as N)	7.7	0.3	0.385	0.015	10
Arsenic	1	0,3	0.363	0.015	0.1
Barium					1
Cadmium					0.01
Chromium					0.05
Lead					0.05
Selenium	 				0.05
Silver	+				0.05
Uranium					0.03
Orbinarii	pCi/		 		0.03
Radium 226	pu)		-		1
Radium 228	+				pCi/L
Radioactivity			1		30
Radioactivity	ug/	1	[mg/	11	mg/L
Benzene	u _{g/}		tmg/	<u> </u>	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)	 		<u> </u>		0.005
1,1,2,2 - tetrachloroethylene (PCE)					0.003
1,1,2 - trichloroethylene (TCE)					0.1
Methylene Chloride	+		 		0.1
Chloroform					0.1
1,1 - dichloroethane	 				0.025
a, a diction de triante	ug/k	p			0.023
Ethylene dibromide (EDB)	ug/ N	b			0.0001
Tarre distribute (EDD)	mg/l	· · · · · · ·			0.3001
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/l	g			
Benzo-a-pyrene		-			0.0007

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

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

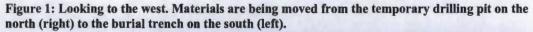
The operator designed and constructed an on-site trench for closure as specified in 19.15.17.13 B.(2) NMAC. Specifically:

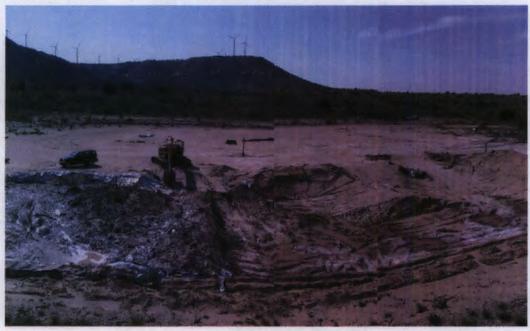
- Steve Kent Construction used the fluids pit located 10 feet south of the temporary pit with dimensions of 80-feet by 60-feet by 15-feet deep pursuant to 19.15.17.13 NMAC.
- II. The on-site trench had a properly constructed foundation and side walls consisting of a firm, unyielding base, smooth and 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

@2010 R.T. HIGHE COLUMNIAL TE, LID.

3/26/2014 Page 1

- 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.





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

Closure Letter Attachment 6 Frio # 1

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.

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: #0#90-

INV52718

Description		Pure Seed	Genn	Dormant	Origin
Bristlegrass, Plains. "M		19.51%	88.00%	3.00%	TX
Buffalograss, "Plains" P	rimed 103 (Bouteloua dastyloides	- 27.63 44.95%	95.00%	0.00%	TX
Grama, Blue "Hachita"	· •	4.39%	89.00%	0 00%	TX X
Grama, Sideoats El Re	no" (Bouteloua curtipenduia:	(ski/8)99% *** ::	94.00%	0.00%	TX
	in Horn" Aeptochloa dubia	9.97%	934716	0.00%	ΤX
Switchgrass, "Alamo"	· •	14.80%	89.00%	0.00%	
	f (Panicum virgatum)	14.99%	77 10%	16.00%	" iX
	"Arriba" (Pascopyrum smithii)	4:45%	95.00%	0.00%	WA
Purity: 92,05%	Inert Matter: 7:50% Qtt	er Crop Seed: 0.38%		· Weed Se	ed: G.07%

Noxious Weeds: None

Test Date 0/2013 "

Appendix A
Confirmatory
Sampling



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

andyl

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

Project: Frio

Lab ID: 1209B21-001 Client Sample ID: N Pit 35

Collection Date: 9/21/2012 4:10:00 AM Received Date: 9/25/2012 2:42:00 PM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	
EPA METHOD 8015B: DIESEL RANGE ORGANICS Ana						
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 RA	NGE				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	

Matrix: SOIL

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH greater than 2
- Reporting Detection Limit

- Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - RPD outside accepted recovery limits R
 - Spike Recovery outside accepted recovery limits Page 1 of 8

OC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B21

02-Oct-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID MB-3971

Prep Date: 9/27/2012

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Batch ID: 3971 Analysis Date: 9/27/2012 RunNo: 5835

SPK value SPK Ref Val %REC LowLimit

SeqNo: 167760

HighLimit

Units: mg/Kg

%RPD **RPDLimit** Qual

Analyte Chloride

Analyte

Chloride

Result **PQL** ND

Sample ID LCS-3971

SampType: LCS Batch ID: 3971 TestCode: EPA Method 300.0: Anions

RunNo: 5835

%REC

97.8

Client ID: LCSS Prep Date: 9/27/2012

Analysis Date: 9/27/2012

SPK value SPK Ref Val

SeqNo: 167761

Units: mg/Kg HighLimit

110

RPDLimit Qual

Sample ID 1209A79-017AMS

SampType: MS

TestCode: EPA Method 300.0: Anions

LowLimit

RunNo: 5835

Client ID: **BatchQC** Batch ID: 3971

15

Result

Units: mg/Kg-dry

Prep Date: 9/27/2012

Analysis Date: 9/27/2012 **PQL**

7.7

PQL

1.5

SeqNo: 167792

Analyte

Client ID:

7.7

SPK value SPK Ref Val 15.33

15.00

%REC 92.7

LowLimit HighLimit

%RPD

%RPD

RPDLimit Qual

Chloride

Result 16

Result

16

1.883

1.883

64.4

117

Sample ID 1209A79-017AMSD

SampType: MSD Batch ID: 3971

15.33

TestCode: EPA Method 300.0: Anions RunNo: 5835

Units: mg/Kg-dry

Qual

Analyte Chloride

Prep Date:

BatchQC

9/27/2012 Analysis Date: 9/27/2012

SPK value SPK Ref Val

SeqNo: 167793

91.8

%REC LowLimit 64.4 HighLimit 117 %RPD 0.836

RPDLimit

20

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits

P Sample pH greater than 2 В Analyte detected in the associated Method Blank

Η Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

RPD outside accepted recovery limits

Page 2 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B21

02-Oct-12

Client:

R.T. Hicks Consultants, LTD

Project:

Analyte

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

%RPD **RPDLimit**

Qual

Petroleum Hydrocarbons, TR

ND

Result

SampType: LCS

PQL

20

RunNo: 5805

TestCode: EPA Method 418.1: TPH

HighLimit

%RPD

Sample ID LCS-3949 Client ID: LCSS

Batch ID: 3949 Analysis Date: 9/27/2012

SeqNo: 166953

Units: mg/Kg

120

120

RPDLimit Qual

Petroleum Hydrocarbons, TR

Prep Date:

Analyte

9/26/2012

Result **PQL** 20 94

SPK value SPK Ref Val

%REC

SPK value SPK Ref Val %REC LowLimit

LowLimit

HighLimit

Qual

Sample ID LCSD-3949

SampType: LCSD

Result

98

TestCode: EPA Method 418.1: TPH RunNo: 5805

94.3

Client ID: LCSS02

Batch ID: 3949

Analysis Date: 9/27/2012

100.0

100.0

SeqNo: 166954

80

Units: mg/Kg

RPDLimit

Analyte Petroleum Hydrocarbons, TR

Prep Date: 9/26/2012

PQL 20

SPK value SPK Ref Val %REC

98.4

HighLimit LowLimit 80

%RPD

4.30

20

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits

Sample pH greater than 2

Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit

R

Page 3 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B21

02-Oct-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID MB-3948	SampT	ype: ME	BLK	Tes	Code: El	PA Method	8015B: Diese	el Range C	Organics	
Client ID: PBS	Batch	ID: 39	48	F	lunNo: 5	796				
Prep Date: 9/26/2012	Analysis D	ate: 9 /	27/2012	S	eqNo: 1	66783	Units: mg/K	(g		
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			

Sampi	ype. LC		163	Code. E	r A Methou	OUIDD. DIES	er Kariye C	ryanics	
Batch	ID: 394	48	F	RunNo: 5	796				
Analysis D	ate: 9/	27/2012	S	SeqNo: 1	66784	Units: mg/k	(g		
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
40	10	50.00	0	79.8	52.6	130			
4.8		5.000		96.0	77.6	140			
	Batch Analysis D Result 40	Batch ID: 39 Analysis Date: 9/ Result PQL 40 10	Batch ID: 3948 Analysis Date: 9/27/2012 Result PQL SPK value 40 10 50.00	Batch ID: 3948 F Analysis Date: 9/27/2012 S Result PQL SPK value SPK Ref Val 40 10 50.00 0	Batch ID: 3948 RunNo: 5 Analysis Date: 9/27/2012 SeqNo: 1 Result PQL SPK value SPK Ref Val %REC 40 10 50.00 0 79.8	Batch ID: 3948 RunNo: 5796 Analysis Date: 9/27/2012 SeqNo: 166784 Result PQL SPK value SPK Ref Val %REC LowLimit 40 10 50.00 0 79.8 52.6	Batch ID: 3948 RunNo: 5796 Analysis Date: 9/27/2012 SeqNo: 166784 Units: mg/M Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 40 10 50.00 0 79.8 52.6 130	Batch ID: 3948 RunNo: 5796 Analysis Date: 9/27/2012 SeqNo: 166784 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD 40 10 50.00 0 79.8 52.6 130	Batch ID: 3948 RunNo: 5796 Analysis Date: 9/27/2012 SeqNo: 166784 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit 40 10 50.00 0 79.8 52.6 130

Sample ID	1209B13-001AMS	SampT	ype: MS	3	Tes	tCode: El	PA Method	8015B: Diese	el Range C	Organics		١
Client ID:	BatchQC	Batch	ID: 39	48	F	RunNo: 5	796					l
Prep Date:	9/26/2012	Analysis D	ate: 9/	27/2012	S	SeqNo: 1	66973	Units: mg/K	(g			l
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 1209B13-001A	SampT	ype: MS	SD.	Test	Code: El	PA Method	8015B: Diese	el Range C	Organics	
Client ID: BatchQC	Batch	ID: 39	48	R	lunNo: 5	796				
Prep Date: 9/26/2012	Analysis D	ate: 9/	27/2012	S	eqNo: 1	67001	Units: mg/K	(g		
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:

P Sample pH greater than 2

R RPD outside accepted recovery limits

^{*} Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1209B21

02-Oct-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID	MB-3940
Client ID:	PBS

SampType: MBLK

TestCode: EPA Method 8015B: Gasoline Range

Batch ID: 3940

RunNo: 5841

Analysis Date: 9/29/2012 POL

5.0

SeqNo: 168217

Units: mg/Kg

116

HighLimit

%RPD **RPDLimit**

Qual

Analyte Gasoline Range Organics (GRO)

9/26/2012

ND 980

Result

1000

98.4

84

Surr: BFB

Prep Date:

Sample ID LCS-3940 SampType: LCS

1000

24.11

964.3

TestCode: EPA Method 8015B: Gasoline Range

Client ID: LCSS

Batch ID: 3940 Prep Date: 9/26/2012 Analysis Date: 9/29/2012 RunNo: 5841 SeqNo: 168218

Units: mg/Kg

116

130

116

Analyte Gasoline Range Organics (GRO) Surr: BFB

Result 24 PQL SPK value SPK Ref Val %REC 5.0 25.00

LowLimit 97.8

105

74 84

%RPD **RPDLimit** HighLimit 117

Qual

Sample ID 1209A69-002AMS SampType: MS

1000

1100

TestCode: EPA Method 8015B: Gasoline Range

Client ID: **BatchQC**

Batch ID: 3940

RunNo: 5856 Analysis Date: 9/29/2012

SPK value SPK Ref Val %REC LowLimit

SeqNo: 168360 Units: mg/Kg

Analyte Surr: BFB

Prep Date:

Result 22 Gasoline Range Organics (GRO)

SPK value SPK Ref Val %REC PQL

LowLimit HighLimit

70

84

RPDLimit %RPD

Qual

Sample ID 1209A69-002AMSD

9/26/2012

SampType: MSD

TestCode: EPA Method 8015B: Gasoline Range

110

Client ID: **BatchQC** Prep Date:

Batch ID: 3940 9/26/2012 Analysis Date: 9/29/2012

SPK value SPK Ref Val %REC

RunNo: 5856 SeqNo: 168361

Units: mg/Kg

%RPD **RPDLimit**

Result Gasoline Range Organics (GRO) 21 1000 **PQL** 4.8

4.8

24.20

SPK value SPK Ref Val %REC 85.0

LowLimit 70

LowLimit

LowLimit

HighLimit 130 22.1

0

Surr: BFB

SampType: MBLK

968.1

107

4.57 84 116

Sample ID MB-4004 Client ID: PBS

Batch ID: 4004

RunNo: 5859

TestCode: EPA Method 8015B: Gasoline Range

Qual

Prep Date: Analyte

Analysis Date: 9/30/2012

1000

SeqNo: 168574

97.0

Units: %REC

%RPD

RPDLimit Qual

Surr: BFB

Client ID:

Sample ID LCS-4004

9/29/2012

SampType: LCS

Batch ID: 4004

TestCode: EPA Method 8015B: Gasoline Range RunNo: 5859

116

HighLimit

Analyte Surr: BFB

Prep Date: 9/29/2012

Analysis Date: 9/30/2012 Result

SeqNo: 168575

Units: %REC

%RPD **RPDLimit**

Qual

1000

970

SPK value SPK Ref Val 1000

%REC 99.8

84

HighLimit 116

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH greater than 2

- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits
- Page 5 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B21

02-Oct-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID MB-3940	SampT	ype: ME	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch	1D: 39	40	F	tun N o: 5 8					
Prep Date: 9/26/2012	Analysis D	ate: 9/	29/2012	S	eqNo: 1					
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	Batch ID: 3940 RunNo: 5841								
Prep Date: 9/26/2012	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 1209A90-001AM	S Samp	SampType: MS TestCode: EPA Method 8021B: Volatiles										
Client ID: BatchQC	Bato	h ID: 39	40	RunNo: 5856								
Prep Date: 9/26/2012	rep 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 1209A90-001AM	ISD SampT	ype: MS	SD	TestCode: EPA Method 8021B: Volatiles							
Client ID: BatchQC	Batch	ı ID: 39 4	40	F	RunNo: 5	856					
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

Page 6 of 8

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

PQL

Batch ID: 4004

PQL

RunNo: 5859

Prep Date: 9/29/2012

Analysis Date: 9/30/2012

SeqNo: 168614

Units: %REC

120

Analyte

Result 0.97

SPK value SPK Ref Val %REC LowLimit

LowLimit

80

HighLimit %RPD

RPDLimit

Qual

Surr: 4-Bromofluorobenzene Sample ID LCS-4004

SampType: LCS

1.000

TestCode: EPA Method 8021B: Volatiles RunNo: 5859

97.4

Client ID: LCSS

SeqNo: 168615

Units: %REC

Prep Date: 9/29/2012

Analysis Date: 9/30/2012

%REC

Result

SPK value SPK Ref Val

104

HighLimit

RPDLimit

Analyte

1.000

120

%RPD

Surr: 4-Bromofluorobenzene

1.0

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits

Sample pH greater than 2

Analyte detected in the associated Method Blank В

Н Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

Not Detected at the Reporting Limit ND

Page 7 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B21

02-Oct-12

Client:

R.T. Hicks Consultants, LTD

Project: Frio										
Sample ID mb-3940	SampT	ype: Mi	BLK	Test	Code: El	PA Method	8260B: VOL	ATILES		
Client ID: PBS	Batch	ID: 39	40	R	unNo: 5	874				
Prep Date: 9/26/2012	Analysis D	ate: 9/	30/2012	S	eqNo: 1	69090	Units: %RE	С		
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 Ics-3940	SampT	ype: LC	s	Test	Code: E	PA Method	8260B: VOL	ATILES		
Client ID: LCSS	Batch	ID: 39	40	R	tunNo: 5	874				
Prep Date: 9/26/2012	Analysis D	ate: 9 /	/30/2012	S	eqNo: 1	69092	Units: %RE	С		
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 1209a69-001am	s SampT	уре: М :	S	Test	Code: E	PA Method	8260B: VOL	ATILES		
Client ID: BatchQC	Batch	ID: 39	40	R	tunNo: 5	874				
Prep Date: 9/26/2012	Analysis D	ate: 9	/30/2012	S	eqNo: 1	69093	Units: %RE	c		
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 1209a69-001am	sd SampT	уре: М	SD	Test	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: BatchQC	Batch	ID: 39	40	R	tunNo: 5	874				
Prep Date: 9/26/2012	Analysis D	ate: 9	/30/2012	S	eqNo: 1	69094	Units: %RE	c		
Analyte	Result	PQL		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.

Е Value above quantitation range

Analyte detected below quantitation limits

Sample pH greater than 2

В Analyte detected in the associated Method Blank

Η Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit RPD outside accepted recovery limits Page 8 of 8



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

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

Sample Log-In Check List

Client	t Name:	RT HICKS		1. 1.	Work Ord	ler Numb	per: 12	209B21		
Rece	eived by/date	:41/10	1 00	105/12						
Logge	ed By:	Ashley Gallego) os !	9/25/2012 2:42:00 l	PM		S	f		
Com	pleted By:	Ashley Gallego)S	9/25/2012 3:27:26 (PN		A	}		
Revie	ewed By:			09/20	0 12					
<u>Chai</u>	n of Cust	ody		•	•					
1. \	Were seals i	ntact?			Yes	☐ No		Not Present 🗹		
2. 1	Is Chain of C	Custody complete	?		Yes	✓ No		Not Present		
3. ł	How was the	sample delivere	d?		<u>Clien</u>	<u>t</u>				
<u>Log</u>	<u>in</u>									
4. (Coolers are	present? (see 19	. for cooler spe	cific information)	Yes	✓ No		NA 🗆		
5. \	Was an atte	mpt made to coo	I the samples?		Yes	☑ No		NA 🗌		
6. \	Were all san	nples received at	a temperature	of >0° C to 6.0°C	Yes	☑ No		NA \square		
7. \$	Sample(s) in	proper containe	r(s)?		Yes	✓ No				
		mple volume for		3)?	Yes	✓ No				
		(except VOA an	•	-	Yes	☑ No				
-		vative added to be		• ·	Yes	☐ No	\checkmark	NA \square		
11 \	VOA vialş ha	ave zero headspa	ice?		Yes	☐ No		No VOA Vials 🗹		
		ımple containers		n?	Yes	□ No	✓			
13.	Does paperv	vork match bottle pancies on chain	labels?		Yes	✓ No		# of preserve bottles check for pH:		
		correctly identifi		Custody?	Yes	✓ No		IOI pi i.	(<2 or >1	2 unless noted)
		at analyses were			Yes	✓ No		Adjuste	ed?	
		ding times able to customer for auti			Yes	✓ No		Checke	d hv	
-		ling (if applic	· ·					4 1135.75		
		otified of all discr		this order?	Yes	□ No		NA 🗹		
	Person	Notified:		Date	e:					
	By Who	om:	<u></u>	Via:	*	I 🗌 Pi	none [☐ Fax ☐ In Pers	son	
	Regard	ing:								
	Client I	nstructions:	· — — — — — — — — — — — — — — — — — — —					· · · · · · · · · · · · · · · · · · ·		
18.	Additional re	marks:							-	بد
			•							
10 (Cooler Infor	rmation								
13. 3	Cooler No		Condition Se	al Intact Seal No	Seal Da	te	Signed	Ву		
	1	4.5 Go	ood Not	Present						

ENVIRONMENTAL: YSIS LABORATORY environmental.com	Ø)				(N JO	N)	Air Bubbles			
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HALL ENVIRON INALYSIS LABO www.hallenvironmental.com	anbr	Fax 5		PO4,5	3'NOS	DNO	Anions (FC	X		
Emvi		Analysis					RCRA 8 Me			
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HALL ENVI ANALYSIS www.hallenvironme	4901 Hawkins NE	Tel. 505-345-3975			(1.40	g po	EDB (Metho			
	ławk	05-3					ortieM) H9T			
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			(1:	508) s	+ TMB	38	TM (X3T)	3		Rei
□ Rush				Hon			ative	00-		Date Time Remarks:
Time:	0		ger:	amil	14		Preservative Type			4
Turn-Around Time:	A'D'	Froject #:	Project Mana	HQ	Sampler: [डिक्ट्राइटिक्ट्राइटि	Container Type and #	9/05 Jar		Received by:
Client: RT HIZKS Consultands	Mailing Address: 961 R. D (rande NW	TIL TANY	email or Fax# dauly of thicks consult, un Project Manager.	☐ Level 4 (Full Validation)			Sample Request ID	NP,135		Time: Relinquished by: IH H2 Down H M M M M M M M M M M M M M M M M M M
of-Cu	961R	1	O PAIN		□ Other		Matrix			Relinquished by:
hain-	Address:	1/8	Fax#'d	ackage: lard	ation	(Type)	Time	Hilb Sau		Time:
Client:	Mailing	Suffe .	email or	OA/QC Package:	Accreditation	□ EDD (Type)	Date	9-2		Date: Time: F

Appendix A

Waste Material Sampling



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

andyl

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 Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGI	E 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 RAI	NGE				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

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- 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
- S Spike Recovery outside accepted recovery limits Page 1 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#:

1209B21

02-Oct-12

Client:

R.T. Hicks Consultants, LTD

Result

Result

Result

15

ND

Project:

Analyte

Chloride

Frio

Sample ID MB-3971

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PB\$

Batch ID: 3971

PQL

1.5

RunNo: 5835

Prep Date: 9/27/2012

Analysis Date: 9/27/2012

SeqNo: 167760

Units: mg/Kg

HighLimit

RPDLimit %RPD

Qual

Sample ID LCS-3971

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS

Batch ID: 3971

RunNo: 5835

SPK value SPK Ref Val %REC LowLimit

Prep Date: 9/27/2012

Analysis Date: 9/27/2012

SeqNo: 167761

Units: mg/Kg

RPDLimit

Analyte Chloride

PQL

1.5

SPK value SPK Ref Val %REC

97.8

LowLimit HighLimit

90

%RPD

%RPD

%RPD

Qual

TestCode: EPA Method 300.0: Anions

HighLimit

Sample ID 1209A79-017AMS

SampType: MS

RunNo: 5835

Client ID: Prep Date: 9/27/2012

BatchQC

Batch ID: 3971 Analysis Date: 9/27/2012

SeqNo: 167792

%REC

92.7

Units: mg/Kg-dry

117

RPDLimit

Qual

Analyte Chloride

PQL 16 7.7

TestCode: EPA Method 300.0: Anions

LowLimit

64.4

Client ID: **BatchQC** SampType: MSD Batch ID: 3971

PQL

7.7

RunNo: 5835

Prep Date:

9/27/2012

Sample ID 1209A79-017AMSD

Analysis Date: 9/27/2012

SeqNo: 167793

Units: mg/Kg-dry

HighLimit

RPDLimit Qual

Analyte Chloride

16

SPK value SPK Ref Val 15.33

15.00

15.33

SPK value SPK Ref Val

1.883

1.883

%REC 91.8

64.4

LowLimit

117 0.836 20

Qualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range E

Analyte detected below quantitation limits

Sample pH greater than 2

В Analyte detected in the associated Method Blank

Η Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit

R

Page 2 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B21

02-Oct-12

Client:

R.T. Hicks Consultants, LTD

Project:

Analyte

Frio

Sample ID MB-3949

SampType: MBLK

TestCode: EPA Method 418.1: TPH

Client ID:

PBS

Batch ID: 3949

RunNo: 5805

SPK value SPK Ref Val %REC LowLimit

Prep Date: 9/26/2012

Result

ND

Analysis Date: 9/27/2012

PQL

20

SeqNo: 166952

Units: mg/Kg

RPDLimit

Qual

Petroleum Hydrocarbons, TR

SampType: LCS

PQL

20

RunNo: 5805

TestCode: EPA Method 418.1: TPH

HighLimit

%RPD

Sample ID LCS-3949 Client ID: LCSS

Batch ID: 3949

Result

94

LowLimit

80

Units: mg/Kg

120

HighLimit

%RPD

Analyte

Prep Date:

9/26/2012

Analysis Date: 9/27/2012

SPK value SPK Ref Val

SeqNo: 166953 %REC

94.3

Qual

Qual

RPDLimit

Petroleum Hydrocarbons, TR

Sample ID LCSD-3949

SampType: LCSD

TestCode: EPA Method 418.1: TPH

Prep Date:

Client ID: LCSS02 9/26/2012 Batch ID: 3949

RunNo: 5805

SeqNo: 166954

Units: mg/Kg

120

RPDLimit

Analyte

Analysis Date: 9/27/2012

100.0

SPK value SPK Ref Val %REC

LowLimit

HighLimit

%RPD

20

Petroleum Hydrocarbons, TR

Result

PQL 20

100.0

98.4

4.30

98

Qualifiers:

Е

Value exceeds Maximum Contaminant Level.

Value above quantitation range Analyte detected below quantitation limits

Sample pH greater than 2

Analyte detected in the associated Method Blank

Η Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit Page 3 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B21

02-Oct-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID MB-3948	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015B: Dies	el Range C	Organics	
Client ID: PBS	Batch	ID: 39	48	F	RunNo: 5	796				
Prep Date: 9/26/2012	Analysis D	ate: 9/	27/2012	S	SeqNo: 1	66783	Units: mg/F	ζg		
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	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID: LCSS	Batch	ID: 39	48	F	RunNo: 5	796				
Prep Date: 9/26/2012	Analysis D	ate: 9/	27/2012	9	SeqNo: 1	66784	Units: mg/F	(g		
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	SampT	ype: M \$	3	Tes	tCode: El	PA Method	8015B: Diese	el Range C	Organics	
Client ID:	BatchQC	Batch	1D: 39	48	F	RunNo: 5	796				
Prep Date:	9/26/2012	Analysis D	ate: 9/	27/2012	9	SeqNo: 1	66973	Units: mg/K	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (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 1209B13-00	1AMSD SampT	уре: М	SD	Tes	tCode: El	PA Method	8015B: Diese	el Range (Organics	
Client ID: BatchQC	Batch	n ID: 39	48	R	RunNo: 5	796				
Prep Date: 9/26/2012	Analysis D)ate: 9 /	27/2012	S	SeqNo: 1	67001	Units: mg/k	ίg		
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

Page 4 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#:

1209B21

02-Oct-12

Client:

R.T. Hicks Consultants, LTD

Project:	Frio	3 Consultar	110, 21								
Sample ID MB	-3940	SampTy	pe: ME	BLK	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	е	
Client ID: PB	s	Batch	ID: 39	40	F	RunNo: 5	841				
Prep Date: 9/	26/2012	Analysis Da	te: 9 /	29/2012	\$	SeqNo: 1	68217	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sasoline Range Org Surr: BFB	ganics (GRO)	ND 980	5.0	1000		98.4	84	116			
Sample ID LC:	S-3940	SampTy	pe: LC	:s	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	e	
Client ID: LC:	ss	Batch	ID: 39	40	F	RunNo: 5	841				
Prep Date: 9/	26/2012	Analysis Da	te: 9 /	29/2012	\$	SeqNo: 1	68218	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sasoline Range Org	ganics (GRO)	24	5.0	25.00	0	97.8	74	117			
Surr: BFB		1000		1000		105	84	116			
Sample ID 120	9A69-002AMS	SampTy	pe: M \$	3	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	e	
Client ID: Bat	tchQC	Batch	ID: 39	40	F	RunNo: 5	856				
Prep Date: 9/	26/2012	Analysis Da	te: 9 /	29/2012	\$	SeqNo: 1	68360	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sasoline Range Org	ganics (GRO)	22	4.8	24.11	0	89.4	70	130			
Surr: BFB		1100		964.3	To the state of th	110	84	116			
Sample ID 120	9A69-002AMSE) SampTy	pe: M \$	SD	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	e	
Client ID: Bat	chQC	Batch	ID: 39	40	F	RunNo: 5	856				
Prep Date: 9/	26/2012	Analysis Da	te: 9 /	29/2012	5	SeqNo: 1	68361	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sasoline Range Org	ganics (GRO)	21	4.8	24.20	0	85.0	70	130	4.57	22.1	
Sum: BFB		1000		968.1		107	84	116	0	0	
Sample ID MB	-4004	SampTy	pe: ME	BLK	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	e	
Client ID: PB:	s	Batch	D: 40	04	F	RunNo: 5	859				
Prep Date: 9/	29/2012	Analysis Da	te: 9 /	30/2012	\$	SeqNo: 1	68574	Units: %RE	c		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		970		1000		97.0	84	116			
Sample ID LC:	S-4004	SampTy	pe: LC	:s	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	e	
Client ID: LC	ss	Batch I	D: 40	04	F	RunNo: 5	859		_		
Prep Date: 9/2	29/2012	Analysis Da	te: 9 /	30/2012	\$	SeqNo: 1	68575	Units: %RE	c		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
		4000		4000				3			

Qualifiers:

Surr: BFB

Value exceeds Maximum Contaminant Level.

1000

1000

- 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

116

H Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit

99.8

Page 5 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: 12

1209B21 *02-Oct-12*

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID MB-3940	Samp	Type: ME	BLK	Test	Code: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batcl	h ID: 39	40	R	tun N o: 5	841				
Prep Date: 9/26/2012	Analysis D	Date: 9 /	29/2012	S	eqNo: 1	68236	Units: mg/K	(g		
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	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batch	1D: 39 4	40	F	Run N o: 5	841				
Prep Date: 9/26/2012	Analysis D	ate: 9/	29/2012	S	SeqNo: 1	68237	Units: mg/K	ζg		
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 1209A90-001AN	IS Samp	Type: MS	6	Tes	tCode: E	PA Method	tiles			
Client ID: BatchQC	Batc	h ID: 39	40	F	RunNo: 5					
Prep Date: 9/26/2012	Analysis [Date: 9/	29/2012	S	SeqNo: 1	68389	Units: mg/k	ίg		
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 1209A90-001AM	SD SampT	Гуре: MS	SD.	Tes	tCode: El	tiles				
Client ID: BatchQC	Batch	h ID: 394	40	F	RunNo: 5	856				
Prep Date: 9/26/2012	Analysis D	Date: 9/2	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	

- * 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, 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

9/29/2012

Batch ID: 4004

PQL

RunNo: 5859

Units: %REC

Analyte

Prep Date:

Analysis Date: 9/30/2012

SPK value SPK Ref Val %REC

SeqNo: 168614

LowLimit

LowLimit

TestCode: EPA Method 8021B: Volatiles

HighLimit

RPDLimit

Qual

Surr: 4-Bromofluorobenzene

0.97

1.000

97.4

120

%RPD

Sample ID LCS-4004

SampType: LCS Batch ID: 4004

RunNo: 5859

Prep Date: 9/29/2012

Client ID: LCSS

Analysis Date: 9/30/2012

SeqNo: 168615

Units: %REC

Qual

1.000

104

%RPD

Surr: 4-Bromofluorobenzene

Result

%REC

80

HighLimit

RPDLimit

120

Analyte

1.0

SPK value SPK Ref Val

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits Sample pH greater than 2

Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Η

ND Not Detected at the Reporting Limit Page 7 of 8

RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

WO#: 12

1209B21

02-Oct-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID mb-3940	SampT	SampType: MBLK			tCode: El	ATILES				
Client ID: PBS	Batcl	Batch ID: 3940			RunNo: 5 8	874				
Prep Date: 9/26/2012	Analysis D	Date: 9/	/30/2012	S	SeqNo: 1	69090	Units: %RE	С		
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 Ics-3940	SampT	ype: LC	S	Test	tCode: El	PA Method	ATILES			
Client ID: LCSS	Batch	Batch ID: 3940			RunNo: 5874					
Prep Date: 9/26/2012	Analysis D	ate: 9/	/30/2012	S	SeqNo: 1	69092	Units: %RE	С		
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	SampT	ype: M \$	3	Test	ATILES					
Client ID: BatchQC	Batch	ı ID: 39	40	R	RunNo: 5	874				
Prep Date: 9/26/2012	Analysis D	ate: 9/	30/2012	S	SeqNo: 1	69093	Units: %RE	С		
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 1209a69-001ams	l SampT	ype: MS	SD	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: BatchQC	Batch	ID: 39	40	F	RunNo: 5	874				
Prep Date: 9/26/2012	Analysis D	ate: 9/	30/2012	8	SeqNo: 1	69094	Units: %RE	С		
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	

- * 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



ttall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

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

Sample Log-In Check List

Clie	nt Name:	RT HICKS	<u> </u>	2/2-1	Work (Order Nu	mber: 1	209B2	1		
Rec	eived by/date	-4/10	1 1	1105/10		-					
Log	ged By:	Ashley Galle	gos	9/25/2012 2:42:0	00 PM		=	F			
Con	npleted By:	Ashley Galle	gos	9/25/2012 3:27:2	26 PM		A	7			
Rev	iewed By:	(09/2	20 12						
<u>Cha</u>	in of Cust	ody		·	•						
1.	Were seals is	ntact?			Ye	s 🗌 N	o 🗆	Not F	Present 🗹		
2.	Is Chain of C	Custody comple	ete?		Ye	s 🗹 N	c 🗌	Not F	Present 🔲		
3.	How was the	sample delive	red?		Cli	<u>ent</u>					
<u>Log</u>	<u>in</u>										
4.	Coolers are	present? (see 1	19. for cooler	specific information)	Ye	s 🗹 N	• 		na 🗀		
5.	Was an atter	mpt made to co	ool the sample	es?	Ye	s 🗹 N	o 🗆		NA 🗌		
6.	Were all sam	ples received	at a temperat	ure of >0° C to 6.0°	C Ye	s 🗹 N	o 🗆		NA \square		
7.	Sample(s) in	proper contain	ier(s)?		Ye	s 🗸 N	o 🗆				
8.	Sufficient sar	mple volume fo	or indicated te	st(s)?	Ye	s 🗹 N	o 🗆				
9.	Are samples	(except VOA a	and ONG) pro	perly preserved?	Ye	s 🗹 N	。 🗆				
10.	Was preserv	ative added to	bottles?		Ye	s 🗌 N	o 		NA \square		
11.	VOA vials ha	ive zero heads	pace?		Ye	s 🗌 N	o 🗆	No VO	A Vials 🗹		
12.	Were any sa	mple container	s received br	oken?	Ye	3 🗆 N	o 🗸				
		ork match bott pancies on chai			Ye	s 🗹 N	o 🗆		# of preserved bottles checked for pH:	d	
14.	Are matrices	correctly ident	ified on Chair	of Custody?	Ye	s 🔽 N	o 🗌		. ((<2 or >12	unless noted)
15.	ls it clear wha	at analyses we	re requested?	?	Ye		_		Adjusted	?	
		ling times able customer for au			Yes	s 🗹 N	o 🗌		Checked	by:	
Spe	<u>cial Handl</u>	ing (if appli	cable)								
17.	Was client no	otified of all dis	crepancies w	ith this order?	Yes	s 🗆 No	o 🗆		NA 🗹		
	Person	Notified:		D	ate:						
	By Who	m:		V	/ia: ☐ eM	ail 🗌 l	Phone	Fax	In Person	n	
	Regardi	ng:		And Andrews Co. 18 Co.			The same time is well				
	Client In	structions:									
18.	Additional rer	marks:	,								
19.	Cooler Information Cooler No.	Temp °C	Condition Food	Seal Intact Seal Not Present	lo Seal D	ate	Signe	d By	1		

Record Tum-Around Time: HALL ENVIRONMENTAL: ALMANAS Standard Rush Rush ANALYSTS ABORATORY	Project Name:	FD'S 4901 Hawki	Project #: Tel. 505-345-3975 Fax 505-345-4107	Analysis Request	(†OS	D Ham; Hor	H9T + (1.81) (1.40) (HA) (A) (A)	SEE		Slassian DOI 4 XX X				
(Am su Hants		12 (Srande NW		1005 9	ct licks consult.co	☐ Level 4 (Full Validation)			Sample Request ID	NP.135				
Chain-of-Custody Record		Mailing Address: 96 / R. b (241-	1	Blankle)	n Other	(e)	ne Matrix	Hilb Soil				
Client:		Mailing Addr	Sinte F-	Phone #: 5	email or Fax	QA/QC Package:	Accreditation D NELAP	□ EDD (Type)	Date Time	9-2 41				



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

andyl

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

Project: Frio

Lab ID: 1206398-001

Client Sample ID: Frio #1

Collection Date: 6/6/2012 1:06:00 PM Received Date: 6/8/2012 4:26:00 PM

Analyses	Result	RL (Qual U	nits	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	SE ORGANICS					Analyst: JMP
Diesel Range Organics (DRO)	160	10	n	ng/Kg	1	6/14/2012 7:39:51 AM
Motor Oil Range Organics (MRO)	ND	51	n	ng/Kg	1	6/14/2012 7:39:51 AM
Surr: DNOP	120	77.6-140	9	%REC	1	6/14/2012 7:39:51 AM
EPA METHOD 8015B: GASOLINE RA	ANGE					Analyst: RAA
Gasoline Range Organics (GRO)	870	250	n	ng/Kg	50	6/14/2012 11:09:51 PM
Surr: BFB	112	69.7-121	9	%REC	50	6/14/2012 11:09:51 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	25	2.5	n	ng/Kg	50	6/14/2012 11:09:51 PM
Toluene	77	2.5	n	ng/Kg	50	6/14/2012 11:09:51 PM
Ethylbenzene	26	2.5	n	ng/Kg	50	6/14/2012 11:09:51 PM
Xylenes, Total	57	5.0	n	ng/Kg	50	6/14/2012 11:09:51 PM
Surr: 4-Bromofluorobenzene	102	80-120	9	%REC	50	6/14/2012 11:09:51 PM
EPA METHOD 300.0: ANIONS						Analyst: BRM
Chloride	72000	3000	n	ng/Kg	2000	6/19/2012 8:43:36 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033	H n	mg/Kg	1	7/12/2012 2:53:50 PM
EPA METHOD 6010B: SOIL METALS	3					Analyst: JLF
Arsenic	ND	2.5	n	ng/Kg	1	7/18/2012 11:58:04 AM
Barium	24	0.10	п	ng/Kg	1	7/18/2012 11:58:04 AM
Cadmium	ND	0.10	r	ng/Kg	1	7/18/2012 11:58:04 AM
Chromium	12	0.30	n	ng/Kg	1	7/18/2012 11:58:04 AM
Lead	0.66	0.25	n	ng/Kg	1	7/18/2012 11:58:04 AM
Selenium	ND	2.5	n	ng/Kg	1	7/18/2012 1:32:17 PM
Silver	ND	0.25	n	ng/Kg	1	7/18/2012 1:32:17 PM
Uranium	ND	5.0	r	ng/Kg	1	7/18/2012 11:58:04 AM

Matrix: SOIL

Qu	al	ifi	er	·s

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL



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

Lab ID: 3073233001

Collected: 06/06/12 13:06 Received: 07/13/12 10:00 Matrix: Solid

Sample: 1206398-001C Frio #1 PWS:

Site ID:

Sample Type:

Results reported on a "dry-weight" basis

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





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

Matrix: Solid

METHOD BLANK: 465563 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	$0.0310 \pm 0.197 (0.371)$	nCila	08/07/12 16:20	

Hall Environmental Analysis Laboratory, Inc.

WO#: 1206398

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

6/12/2012

Batch ID: 2347

RunNo: 3387 SeqNo: 94687

Units: mg/Kg

Analyte

Prep Date:

Analysis Date: 6/12/2012 PQL

1.5

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

RPDLimit

Qual

Chloride

ND

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

Value above quantitation range

Analyte detected below quantitation limits

RPD outside accepted recovery limits

Analyte detected in the associated Method Blank В

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Reporting Detection Limit RL

Page 2 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#:

1206398 10-Aug-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID MB-2345	SampT	уре: МЕ	BLK	Tes	Code: El	PA Method	8015B: Diese	el Range (Organics	
Client ID: PBS	Batch	n ID: 234	45	F	tunNo: 3	354				
Prep Date: 6/12/2012	Analysis D	ate: 6/	12/2012	S	eqNo: 9	3882	Units: mg/K	ζg		
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	SampT	ype: LC	s	Tes	Code: El	PA Method	8015B: Dies	el Range C	Organics	
Client ID: LCSS	Batch	ID: 23	45	R	tunNo: 3	354				
Prep Date: 6/12/2012	Analysis D	ate: 6/	12/2012	S	eqNo: 9	3885	Units: mg/F	ζg		
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:

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

Page 3 of 7

^{*/}X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

Hall Environmental Analysis Laboratory, Inc.

WO#: 1206398

10-Aug-12

Client:

R.T. Hicks Consultants, LTD

1000

Project:

Surr: BFB

Frio

Sample ID MB-2342	SampT	ype: ME	BLK	Test	Code: El	PA Method	8015B: Gaso	line Rang	е	
Client ID: PB\$	Batch	ID: 23	42	R	lunNo: 34	456				
Prep Date: 6/12/2012	Analysis D	ate: 6 /	14/2012	S	eqNo: 9	6796	Units: mg/k	(g		
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	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	e	
Client ID: LCSS	Batch	1D: 23	42	F	RunNo: 3	456				
Prep Date: 6/12/2012	Analysis D	nalysis Date: 6/14/2012			SeqNo: 9	6800	Units: mg/F	(g		
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			

69.7

121

1000

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

Page 4 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#:

1206398

10-Aug-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID MB-2342	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PB\$	Batch	n ID: 23	42	RunNo: 3456						
Prep Date: 6/12/2012	Analysis D)ate: 6/	14/2012	8	SeqNo: 9	6832	Units: mg/K	g		
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	SampT	ype: LC	s	TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batcl	h ID: 23	42	F	RunNo: 3	456					
Prep Date: 6/12/2012	Analysis D	Date: 6/	14/2012	S	SeqNo: 9	6836	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:

R RPD outside accepted recovery limits

RL Reporting Detection Limit

^{*/}X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: 1206398 10-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

TestCode: EPA Method 7471: Mercury SampType: MBLK Sample ID MB-2781

Client ID: PBS SeqNo: 114351 Units: mg/Kg Analysis Date: 7/12/2012 Prep Date: 7/11/2012

%RPD **RPDLimit** Qual SPK value SPK Ref Val %REC LowLimit HighLimit Analyte Result PQL

RunNo: 3998

0.033 ND Mercury

TestCode: EPA Method 7471: Mercury Sample ID LCS-2781 SampType: LCS

RunNo: 3998 Client ID: LCSS Batch ID: 2781

Batch ID: 2781

Prep Date: 7/11/2012 Analysis Date: 7/12/2012 SeqNo: 114352 Units: mg/Kg

%RPD **RPDLimit** Qual **PQL** SPK value SPK Ref Val %REC HighLimit Result Analyte

98.3 120 0.16 0.033 0.1667 Mercury

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

Value above quantitation range

Analyte detected below quantitation limits

RPD outside accepted recovery limits

Analyte detected in the associated Method Blank В

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

Reporting Detection Limit

Page 6 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206398**

10-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID MB-2831 Client ID: PBS	•	ype: ME			PA Method	6010B: Soil	Metals					
Prep Date: 7/16/2012	Analysis D	ate: 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	SampT	ype: LC	S	Tes	estCode: EPA Method 6010B: Soil Metals								
Client ID: LCSS	Batch	ID: 28	31	F	RunNo: 4								
Prep Date: 7/16/2012	Analysis Date: 7/18/2012			8	SeqNo: 117869 Units: mg				ı/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Arsenic	25	2.5	25.00	0.53 7 0	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	SampT	SampType: MBLK			TestCode: EPA Method 6010B: Soil Metals						
Client ID: PBS	Batch	ID: 283	31	F	RunNo: 4	119					
Prep Date: 7/16/2012	Analysis Da	ate: 7/	18/2012	S	SeqNo: 1	17929	Units: mg/K	(g			
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	SampT	ype: LC	S	Tes	tCode: El					
Client ID: LCSS	Batch	ID: 28	31	R	RunNo: 4	119				
Prep Date: 7/16/2012	Analysis D	ate: 7 /	18/2012	S	SeqNo: 1	17930	Units: mg/k	(g		
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

Page 7 of 7



Hall Environmental Analysis Laborator, 4901 Hawkins NE Albuquerque, NM 87.105

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Clie	nt Name:	RT HICKS				Work Or	der Nu	mber:	1206398	3		
Rec	eived by/date	:A	-ole/08/1	Z								
Logg	ged By:	Anne Thor	ne	6/8/2012 4	:26:00 PN	A		an	A	-		
Com	npleted By:	Anne Thor	ne	6/11/2012				an	. A.			
Revi	iewed By:	AT do	111/2	THE STATE OF THE S								
Cha	in of Cust			0								
1.	Were seals i	intact?				Yes	y N	o 🗆	Not F	Present 🗌		
2.	Is Chain of C	Custody comp	olete?			Yes	✓ N	lo 🗆	Not F	Present 🗌		
3.	How was the	sample deliv	vered?			Clier	ţ					
Log	<u>In</u>											ž.
4.	Coolers are	present? (see	19. for coole	r specific inform	ation)	Yes	✓ N	lo 🗆		NA 🗆		
5.	Was an atte	mpt made to	cool the samp	iles?		Yes	✓ N	lo 🗆		na 🗆		
6.	Were all san	nples receive	d at a tempera	ature of >0°C to	6.0°C	Yes	✓ N	o 🗆		na 🗆		
7.	Sample(s) in	proper conta	iner(s)?			Yes	✓ N	o 🗆				
8.	Sufficient sa	mple volume	for indicated t	est(s)?		Yes	✓ N	b \Box				
9.	Are samples	(except VOA	and ONG) pr	operly preserve	d?	Yes	✓ N	lo 🗆				
10.	Was preserv	ative added t	to bottles?			Yes	□ N	o 🗹		NA 🗀		
11.	VOA vials ha	ave zero head	ispace?			Yes	□ N	o 🗆	No VO	A Vials 🗹		
12.	Were any sa	ımple contain	ers received b	roken?		Yes		o 🗹				
		vork match be pancies on ch	ottle labels? nain of custody	()		Yes	✓ N	o 🗆	1	# of preserved bottles checked for pH:	i	
14.	Are matrices	correctly ide	ntified on Cha	in of Custody?		Yes	✓ N	o 🗆		(<2 or >1	2 unless noted)
15.	Is it clear wh	at analyses v	vere requested	i?		Yes	✓ N	o 🗆	l	Adjusted	?	
		ding times ab customer for	le to be met? authorization.)		Yes	✓ N	o 🗌		Checked	by:	
Spe	cial Handi	ing (if app	(licable)						<u> </u>			
17.	Was client n	otified of all d	iscrepancies v	with this order?		Yes	□ N	• 		NA 🗹		-
	Person	Notified:			Date		,					
	By Who	om:			Via:	eMa	i 🗌	Phone	☐ Fax	☐ In Persor	1	
	Regard	ing:			77778-107							
	Client la	nstructions:										
18.	Additional re	marks:										
19.	Cooler Infor		Location	li occurrenti	Daniel I	0		٠.	4.5	ı		
	Cooler No	Temp °C	Good Good	Seal Intact	Seal No	Seal Da	ie	Sign	ed By	-		
										_		

Air Bubbles (Y or N) these results cal analysis **ANALYSIS LABORATORY** HALL ENVIRONMENTAL 4901 Hawkins NE - Albuquerque, NM 87109 BJ-CX-FA Fax 505-345-4107 (AOV-ime2) 0728 Colone Time The to be wine and time www.hallenvironmental.com Analysis Request (AOV) 808S8 8081 Pesticides / 8082 PCB's Anions (FCINO3, NO2, PO4, SO4) RCRA 8 Metals Tel. 505-345-3975 (SMIS 07S8 10 01E8) a'HAG EDB (Method 504.1) (1.814 bodteM) H9T (ORM \ ORG \ ORG) 83108 H9T BTEX + MTBE + TPH (Gas only) BTEX MTBE + TMB's (8021) 8 □ Rush Preservative Tum-Around Time: Frib email or Fax#: david a rthicks Consult, con Project Manager. Project Name: Container Troe and # □ Standard O'THE SERVED Sampler: Project #: Received b Mailing Address: 90/ Rib Grande Bludin N.M 87/04 □ Level 4 (Full Validation) Sample Request ID Hicks Consultan Chain-of-Custody Record Mark Separate Frib # Swite F-142, Alb. yd bedsinpr □ Other Matrix 6-6-12 13:06 Sol Time 6-8-12 16:26 QA/QC Package: □ EDD (Type Accreditation □ Standard O NELAP Phone #: Date

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



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

andy

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report Lab Order 1207990

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/27/2012

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: Frio 5 Point Pit Comp Collection Date: 7/18/2012 2:00:00 PM **Project:**

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 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

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Reporting Detection Limit
- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits $Page \ 1 \ of \ 14$

Analytical Report

Lab Order 1207990

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/27/2012

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 Qu	al 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

- 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
- X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits Page 2 of 14

Analytical Report

Lab Order 1207990

Date Reported: 8/27/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD

1207990-001

Lab ID:

Client Sample ID: Frio 5 Point Pit Comp

Project: Frio

Collection Date: 7/18/2012 2:00:00 PM Received Date: 7/23/2012 2:01:00 PM

Analyses	Result	RL Qu	al 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

Matrix: SOIL

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Reporting Detection Limit RL
- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits Page 3 of 14



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

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 Radium-228	EPA 901.1m EPA 901.1m	1.06 ± 0.292 (0.365) 0.718 ± 0.403 (0.647)	pCi/g pCi/g	08/22/12 14:14 08/22/12 14:14		





QUALITY CONTROL DATA

Project:

1207990

QC Batch:

Pace Project No.: 3074318

RADC/12798

Analysis Method:

EPA 901.1m

QC Batch 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	$-0.029 \pm 0.830 (1.53)$	pCi/g	08/22/12 14:46	

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

HighLimit

SeqNo: 123128

Units: mg/Kg

Analyte

Prep Date: 7/24/2012

Analysis Date: 7/25/2012 **PQL**

RPDLimit %RPD

Qual

Chloride

ND 1.5

Sample ID LCS-3003

Client ID: LCSS SampType: LCS

RunNo: 4422

Prep Date: 7/24/2012

Batch ID: 3003

Result

Analysis Date: 7/25/2012

1.5

SeqNo: 123129

Units: mg/Kg

RPDLimit

Qual

Result **PQL**

15.00

SPK value SPK Ref Val

HighLimit

%RPD

0

%REC 95.3

90

TestCode: EPA Method 300.0: Anions

LowLimit

110

Analyte Chloride

14

SPK value SPK Ref Val %REC LowLimit

Qualifiers:

В Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Reporting Detection Limit RL

Е Value above quantitation range

S

Analyte detected below quantitation limits

R RPD outside accepted recovery limits Page 4 of 14

Spike Recovery outside accepted recovery limits

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:

Analyte

PBS

Batch ID: 3092

RunNo: 4510

HighLimit

Prep Date: 7/30/2012

Analysis Date: 7/30/2012 Result

SeqNo: 126420

Units: µg/Kg

RPDLimit

Qual

1,2-Dibromoethane

ND 0.10

Sample ID LCS-3092

SampType: LCS

TestCode: EPA Method 504.1 Modified: EDB

%RPD

%RPD

Client ID: LCSS

Batch ID: 3092

RunNo: 4510

%REC

Prep Date: 7/30/2012

SeqNo: 126423

Units: µg/Kg

Analyte

Analysis Date: 7/30/2012 **PQL**

SPK value SPK Ref Val %REC LowLimit

RPDLimit

Qual

1,2-Dibromoethane

0.10

SPK value SPK Ref Val 1.000

LowLimit

70

HighLimit 130

Sample ID 1207990-001AMS

SampType: MS

TestCode: EPA Method 504.1 Modified: EDB

Prep Date: 7/30/2012

Client ID: Frio 5 Point Pit Com

Batch ID: 3092 Analysis Date: 7/30/2012 RunNo: 4510 SeqNo: 126430

Units: µg/Kg

Analyte

Result

PQL

1,2-Dibromoethane

Result

1.1

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit** Qual

1.1

0.10

112

130

Sample ID 1207990-001AMSD

Prep Date: 7/30/2012

SampType: MSD

TestCode: EPA Method 504.1 Modified: EDB

Client ID: Frio 5 Point Pit Com

Batch ID: 3092

RunNo: 4510

Units: µg/Kq

RPDLimit Qual

Analyte 1,2-Dibromoethane Analysis Date: 7/30/2012 **PQL** 0.099

SPK value SPK Ref Val %REC LowLimit 0.9943

1.009

0

111

SeqNo: 126431

70

70

HighLimit 130 %RPD 1.70

20

Qualifiers:

RL

В Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded Н

Not Detected at the Reporting Limit Reporting Detection Limit

E Value above quantitation range

R

J Analyte detected below quantitation limits

Spike Recovery outside accepted recovery limits

RPD outside accepted recovery limits

Page 5 of 14

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:

Batch ID: 3010

RunNo: 4444

Prep Date: 7/24/2012

Analysis Date: 7/26/2012

SeqNo: 124694

Units: %REC

Analyte

116

Qual

Surr: BFB

Result

PQL SPK value SPK Ref Val %REC LowLimit 1000

99.6

HighLimit

%RPD **RPDLimit**

Sample ID LCS-3010

SampType: LCS

TestCode: EPA Method 8015B: Gasoline Range RunNo: 4444

Client ID: LCSS

Prep Date: 7/24/2012

Batch ID: 3010 Analysis Date: 7/26/2012

SeqNo: 124695

Units: %REC

HighLimit

RPDLimit

Result

1000

1000

SPK value SPK Ref Val %REC

108

Analyte Surr: BFB

%RPD

Qual

1100

116

Qualifiers:

В Analyte detected in the associated Method Blank

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Reporting Detection Limit

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits Page 6 of 14

Spike Recovery outside accepted recovery limits

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

Analyte

Client ID:

Client ID: PBS

Batch ID: 3010

RunNo: 4444

Prep Date: 7/24/2012

Result

1.0

Analysis Date: 7/26/2012

SeqNo: 124745

Units: %REC

HighLimit

%RPD

%RPD

RPDLimit

RPDLimit

Qual

Surr: 4-Bromofluorobenzene

SPK value SPK Ref Val %REC LowLimit 1.000

104

120

Qual

Sample ID LCS-3010

LCSS

SampType: LCS Batch ID: 3010

RunNo: 4444

TestCode: EPA Method 8021B: Volatiles

Prep Date: 7/24/2012

Analysis Date: 7/26/2012

PQL

SeqNo: 124746

Units: %REC

%REC LowLimit HighLimit

Analyte Surr: 4-Bromofluorobenzene Result 1.1

1.000

SPK value SPK Ref Val

112

120

Qualifiers:

Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

RL Reporting Detection Limit Ε Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits

Page 7 of 14

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207990

27-Aug-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID MB-3049	SampT	уре: МВ	LK	Tes	tCode: E	PA Method	8082: PCB's					
Client ID: PB\$	Batch	ID: 30 4	19	F	RunNo: 4	552						
Prep Date: 7/26/2012	Analysis D	ate: 8/1	1/2012	S	SeqNo: 128150 Units: mg/ !				Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Arodor 1016	ND	0.020										
Aroclor 1221	ND	0.020										
Aroclor 1232	ND	0.020										
Arodor 1242	ND	0.020										
Aroclor 1248	ND	0.020										
Arodor 1254	ND	0.020										
Aroclor 1260	ND	0.020										
Surr: Decachlorobiphenyl	0.055		0.06250		88.0	20.7	114					
Sample ID LCS-3049	SampT	ype: LC	s	Tes	tCode: El	PA Method	8082: PCB's					
0"				_								

Sample ID LCS-3049	SampT	ype: LC	S	Tes	tCode: El	PA Method	8082: PCB's			
Client ID: LCSS	Batch	ID: 30	49	R	RunNo: 4	552				
Prep Date: 7/26/2012	Analysis D	ate: 8/	1/2012	S	SeqNo: 1	28151	Units: mg/K	ζg		
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	SampT	ype: M \$	3	Test	tCode: El	PA Method	8082: PCB's			
Client ID:	Frio 5 Point Pit Co	m Batch	ID: 30	49	R	RunNo: 4	552				
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
Arodor 1260		0.052	0.020	0.1243	0	42.1	45	117			S
Surr: Decach	nlorobiphenyl	0.030		0.06213		48.0	20.7	114			

Sample ID 1207990-001A	MSD SampT	ype: MS	SD	Test	tCode: El	PA Method	8082: PCB's			
Client ID: Frio 5 Point Pi	it Com Batch	1D: 30	49	R	tunNo: 4	552				
Prep Date: 7/26/2012	Analysis D	ate: 8 /	1/2012	S	eqNo: 1	28772	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte Aroclor 1260	0.047	PQL 0.020	SPK value 0.1256	SPK Ref Val	%REC 37.0	LowLimit 45	HighLimit 117	%RPD 11.7	RPDLimit 20	Qual S

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

Page 8 of 14

Hall Environmental Analysis Laboratory, Inc.

WO#:

1207990

27-Aug-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID mb-3010	SampT	ype: ME	BLK	Tes	TestCode: EPA Method 8260B: VOLATILES					
Client ID: PBS	Batch	n ID: 30	10	F	tunNo: 4	468				
Prep Date: 7/24/2012	Analysis D			S	eqNo: 1	25366	Units: mg/F	ζg		
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
- 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

Page 9 of 14

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207990

27-Aug-12

Client: R.T. Hicks Consultants, LTD

Project: Frio

Sample ID mb-3010	SampT	ype: MB	LK	Test	tCode: El	PA Method	8260B: VOLA	ATILES		
Client ID: PBS	Batch	n ID: 301	0	R	RunNo: 44	468				
Prep Date: 7/24/2012	Analysis D	Date: 7/2	25/2012	S	SeqNo: 12	25366	Units: mg/K	(g		
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 Ics-3010	SampT	ype: LC	s	Tes	tCode: El	ATILES				
Client ID: LCSS	Batch	1D: 30	10	F	RunNo: 4	468				
Prep Date: 7/24/2012	Analysis D	ate: 7/	25/2012	8	SeqNo: 1	25367	Units: mg/h	ζg		
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
- 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
- Page 10 of 14
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

WO#:

1207990

27-Aug-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID Ics-3010	SampTy	pe: LC	s	Test	Code: E	PA Method	8260B: VOL	ATILES		
Client ID: LCSS	Batch	ID: 30	10	R	unNo: 4	468				
Prep Date: 7/24/2012	Analysis Da	ite: 7/	25/2012	S	eqNo: 1	25367	Units: mg/K	(g		
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	SampT	ype: ME	BLK	Tes	PA Method	nod 8260B: VOLATILES				
Client ID: PBS	Batch	n ID: 30	10	F	lunNo: 4	498				
Prep Date: 7/24/2012	Analysis D)ate: 7/	27/2012	S	SeqNo: 1	26123	Units: mg/K	(g		
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
- 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
 - Spike Recovery outside accepted recovery limits

Page 11 of 14

Hall Environmental Analysis Laboratory, Inc.

WO#:

1207990

27-Aug-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID mb-3010	SampT	ype: MBLK	TestCode:	EPA Method	1 8260B: VOLAT	ILES		
Client ID: PBS	Batcl	n ID: 3010	RunNo:	4498				
Prep Date: 7/24/2012	Analysis D	Date: 7/27/2012	SeqNo:	126123	Units: mg/Kg			
	•		·					
Analyte	Result		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
- 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

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1207990

27-Aug-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID MB-3050	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8310: PAHs			
Client ID: PBS	Batcl	n ID: 30	50	F	tunNo: 4	559				
Prep Date: 7/26/2012	Analysis D	Date: 8/	1/2012	S	eqNo: 1	28155	Units: mg/K	g		
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	Samp	Type: LC	s	Tes	tCode: El	PA Method	8310: PAHs					
Client ID: LCSS	Batc	h ID: 30	50	F	RunNo: 4	559						
Prep Date: 7/26/2012	Analysis [Date: 8/	1/2012	S	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
- 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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1:

1207990 27-Aug-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID LCS-3050	SampT	Type: LC	s	Tes	tCode: El					
Client ID: LCSS	Batch	Batch ID: 3050			RunNo: 4	559				
Prep Date: 7/26/2012	Analysis D	Analysis Date: 8/1/2012			SeqNo: 1	28157	Units: mg/k			
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	SampT	ype: LC	SD	Tes	tCode: El					
Client ID: LCSS02	Batci	n ID: 30	50	F	RunNo: 4	559				
Prep Date: 7/26/2012	Analysis [Date: 8/	1/2012	S	SeqNo: 1	2821 7	Units: mg/K	ίg		
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
- 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



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RT HICKS	Work Order Number: 1207	7990
Received by/date: 6 07/23/12		
Logged By: Lindsay Mangin 7/23/2012 2:01:00 PM	July May	po
Completed By: Lindsay Mangin 7/24/2012 9:49:22 AM	i OF IND	⊋ o
Reviewed By: IO 02/24/12		
Chain of Custody		
1. Were seals intact?	Yes 🗌 No 🔲 N	ot Present 🗹
2. Is Chain of Custody complete?	Yes 🗹 No 🗌 N	ot Present
3. How was the sample delivered?	Client	
<u>Log In</u>		
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 🗌	# of preserved bottles checked for pH:
14. Are matrices correctly identified on Chain of Custody?	Yes 🗹 No 🗌	(<2 or >12 unless noted)
15. Is it clear what analyses were requested?	Yes 🗹 No 🗌	Adjusted?
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹 No 🗔	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 I	Fax 🔲 In Person
Regarding:		10 politico de constante de la
Client Instructions:		
18. Additional remarks:		
19. Cooler Information		
Cooler No Temp °C Condition Seal Intact Seal No	Seal Date Signed B	<u>v</u>
1 5.8 Good Not Present		

Air Bubbles (Y or N) 3/5 **ANALYSIS LABORATORY** HALL ENVIRONMENTAL Remarks: Client does not wan 23/12 See attached 4901 Hawkins NE - Albuquerque, NM 87109 2 Fax 505-345-4107 (AOV-imas) 07S8 3 www.hallenvironmental.com (AOV) 80858 D 8081 Pesticides / 8082 PCB's CI)103,102,PO4,504) RCRA 8 Metals Tel. 505-345-3975 (HA9 10 AN9) 01:28 perBavia 1200ct EDB (Method 504.1) (I.814 bodieM) H97 TPH Method 8015B (Gas/Diesel) BTEX + MTBE + TPH (Gas only) BTEX + MTBE + TMB's (8021) 8 3 30 Hamilton □ Rush Preservative 5 Type 200 Turn-Around Time: Project Manager. Frio 2 Hos glas Project Name: David □ Standard Type and # Container Sampler: Project #: Frie Speint pitamp Mailing Address: 90/ Rio Grande Blud NW arthickscensull, com ☐ Level 4 (Full Validation) Sample Request ID Chain-of-Custody Record Client: RT Hicks Consultants Alb. N.M. 2004 □ Other Matrix 10 7-18-12 14:00 501 Line F-143 Phone #: 505 14:05 Time email or Fax#: QA/QC Package: □ EDD (Type) Accreditation □ Standard O NELAP 7-8-12 Date

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)	
	(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)	
	(11)	Silver (Ag)	0.05 mg/l
	(12)	Uranium (U)	
	(13)	Rathoactivity: Combined Radium-226 & Radium-228	30 pCi/l
	(14)	Benzene	
	(15)	Polychlorinated biphenyls (PCB's)	
	§ (16)	Toluene	0.75 mg/l
	[(17)	Carbon Tetrachloride	0.01 mg/l
	(15) (16) (17) (18) (19) (20) (21) (22) (23) (24)	1,2-dichloroethane (EDC)	
	[19]	1,1-dichloroethylene (1,1-DCE)	
	(20)	1,1,2,2-tetrachloroethylene (PCE)	
1	(21)	1,1,2-trichloroethylene (TCE)	
I	(22)	ethylbenzene	
1	(23)	total xylenes	0.62 mg/l
	(24)	methylene chloride	0.1 mg/l
•	图 (23)	chloroform	
1	(26)	1,1-dichloroethane	
	(27)	ethylene dibromide (EDB)	
	(28)	1,1,1-trichloroethane?	
	(29)	1,1,2-trichloroethane	
	(30)	1,1,2,2-tetrachloroethane	
	(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
	В.	Other Standards for Domestic Water Supply	
	(1)	Chloride (Cl)	250.0 mg/l



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

andel

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

Frio Lab ID: 1209B54-001

Project:

Client Sample ID: Cuttings 31

Collection Date: 9/21/2012 2:26:00 PM 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

Matrix: SOIL

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH greater than 2
- RL Reporting Detection Limit

- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits Page 1 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B54

12-Oct-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID mb-4029 vessel	#6 SampT	ype: ME	BLK	Test	Code: Vo	olatiles by	8260B/1312			
Client ID: PBS	Batch	ID: 40 2	29	RunNo: 5995						
Prep Date: 10/1/2012	Analysis Date: 10/4/2012			S	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 Ics-4029	SampT	ype: LC	s	Tes	tCode: V	olatiles by				
Client ID: LCSS	Batch	iD: 40	29	F	RunNo: 5	995				
Prep Date: 10/1/2012	Analysis D	ate: 10)/4/2012	8	SeqNo: 1	72886	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			В
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	SampT	уре: М \$	 S	Tes	tCode: V	olatiles by	8260B/1312			-
Client ID: Cuttings 31	Batch	ID: 40	29	F	RunNo: 5	995				
Prep Date: 10/1/2012	Analysis D	ate: 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	SampTy	ре: М	SD	Tes	tCode: V	olatiles by	8260B/1312			
Client ID:	Cuttings 31	Batch	ID: 40	29	F	RunNo: 5	5995				
Prep Date:	10/1/2012	Analysis Date: 10/4/2012			8	SeqNo: 1	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

Page 2 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

1209B54 12-Oct-12

Client:

R.T. Hicks Consultants, LTD

Project:

Frio

Sample ID 1209b54-001amsc	I SampT	ype: MS	SD .	Tes	tCode: V	olatiles by	8260B/1312			
Client ID: Cuttings 31	Batch	ID: 402	29	RunNo: 5995						
Prep Date: 10/1/2012	Analysis D	ate: 10	/4/2012	S	SeqNo: 1	72888	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:

P Sample pH greater than 2

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

Page 3 of 5

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

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

PQL

RunNo: 6088

Prep Date:

Result

Analysis Date: 10/9/2012

SeqNo: 175671

SPK value SPK Ref Val %REC LowLimit

Units: mg/L HighLimit

%RPD **RPDLimit** Qual

Analyte Chromium

ND 5.0

Qualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range E

Analyte detected below quantitation limits

Sample pH greater than 2

Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

RPD outside accepted recovery limits

Page 4 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

1209B54 12-Oct-12

Client:

R.T. Hicks Consultants, LTD

Result

Project:

Sample ID MB-4104

SampType: MBLK

TestCode: EPA Method 6010B: TCLP Metals

Client ID:

PBW

Batch ID: 4104

PQL

RunNo: 6032

Prep Date: 10/4/2012

Analysis Date: 10/5/2012

SeqNo: 173813

Units: mg/L HighLimit

RPDLimit %RPD

Qual

Analyte Chromium

ND 5.0

Sample ID LCS-4104

Client ID: LCSW SampType: LCS Batch ID: 4104

PQL

RunNo: 6032

Units: mg/L

Prep Date:

10/4/2012

Analysis Date: 10/5/2012

SeqNo: 173814 SPK value SPK Ref Val %REC

SPK value SPK Ref Val %REC LowLimit

%RPD

Qual

Chromium

Result

0.5000

0

Analyte

ND

80

TestCode: EPA Method 6010B: TCLP Metals

120

5.0

87.0

LowLimit

HighLimit

RPDLimit

Qualifiers:

Value exceeds Maximum Contaminant Level.

Е Value above quantitation range

Analyte detected below quantitation limits

Sample pH greater than 2

Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

Not Detected at the Reporting Limit ND

Page 5 of 5



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Clie	nt Name: RT HICKS	<i>(</i> , , , , , , , , , , , , , , , , , , ,	Work Or	der Nu	ımber:	1209B	54	
Rec	eived by/date:	- 9/25/12						
Log	ged By: Anne Thorne	9/25/2012 2:50:00 P	M		am	u Sham	_	
Con	npleted By: Anne Thorne	9/26/2012			0-	. A.	-	
Rev	riewed By:	09/25/12			C/M	<i>ر</i> ر د		
Cha	nin of Custody							
	Were seals intact?		Yes	✓ 1	No 🗀	Not	Present	
2.	Is Chain of Custody comple	ite?	Yes	V 1	No 🗆	Not	Present	
3.	How was the sample delive	red?	Clier	<u>ıt</u>				
Log	<u>ln</u>							
4.	Coolers are present? (see 1	9. for cooler specific information)	Yes	Y 1	No 🗆		na 🗆	
5.	Was an attempt made to co	ool the samples?	Yes	V 1	No 🗆		NA \square	
6.	Were all samples received	at a temperature of >0° C to 6.0°C	Yes	V 1	No 🗆		NA 🗆	
7.	Sample(s) in proper contain	er(s)?	Yes	V 1	No 🗆			
8.	Sufficient sample volume for	or indicated test(s)?	Yes	V 1	No 🗆			
9.	Are samples (except VOA a	and ONG) properly preserved?	Yes	V	√o □			
10.	Was preservative added to	bottles?	Yes	□ !	No 🗹		NA \square	
11	VOA vials have zero heads	pace?	Yes		No 🗆	No VO	OA Vials ⊻	
	Were any sample container		Yes		No 🗹	Г		
13.	Does paperwork match bott (Note discrepancies on cha		Yes	V	No 🗆		# of preserved bottles checked for pH:	
14.	Are matrices correctly ident	ified on Chain of Custody?			√ 0			or >12 unless noted)
15.	Is it clear what analyses we	re requested?		✓ !	_		Adjusted?	
16.	Were all holding times able (If no, notify customer for at		Yes	⊻ ।	No 🗌		Checked by	
Spe	cial Handling (if appli	cable)				Ĺ		
	Was client notified of all dis		Yes		No 🗆		NA 🗹	
	Person Notified: By Whom: Regarding: Client Instructions:	Date Via:	☐ eMa	il [Phone	☐ Fa	in Person	
18.	Additional remarks:							
19.	Cooler No Temp °C 1 4.5	Condition Seal Intact Seal No Good Not Present	Seal Da	ite	Sign	ed By		

HALL ENVIRONMENTAL	ANALYSIS LABORATOR www.hallenvironmental.com	Albuquerque, NM 87109	Fax 505-345-4107	(*C	hcB's		N, ₆ C	on,ic sebic	D, F) snoin. Diagram 180 Sov) 8085 Diagram 180 Sov) 8085 Sov)	8 8				
HALLE	ANALY www.hallen	4901 Hawkins NE - Al	Tel. 505-345-3975	(les		(Gs	181 1.81 1.40	08 bo	TEX + MT PH Metho DB (Metho 310 (PNA 310 (PNA	T 8				Remarks:
Time	□ Standard □ Rush Project Name:	Frie	Project #:		7	Sampler 7 1		Period Control of the	Container Preservative + + Type and # Type	1-408 alace 200				Received by: Date Time R Received by: Date Time R
	RT HOKS CONSULTANTS	Mailing Address: 961 Rio Grande RIW	24	email or Fax# druid Orthoks consult, Con Project Manager.	QAVQC Package:		□ NELAP □ Other	□ EDD (Type)	Time Matrix	Soil CATOLING				3-25 14:50 Date: Relinquished by:



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

Only

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

Project: Read & Stevens Frio

Lab ID: 1210C59-001

Matrix: SOIL

Client Sample ID: Frio #1 Cuttings Collection Date: 10/23/2012 1:34:00 PM

Received Date: 10/26/2012 3:42:00 PM

Analyses	Result	RL Qu	al 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.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- 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
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

WO#:

1210C59

01-Nov-12

Client:

R.T. Hicks Consultants, LTD

Project:

Read & Stevens Frio

Sample ID mb-4560 Client ID: PBS Prep Date: 10/29/2012	•	ype: ME		F	tCode: El RunNo: 6: SeaNo: 1:	572	8260B: VOL			
Analyte	,		SPK Ref Val	•			%RPD	RPDLimit	Qual	
Naphthalene	ND	0.10					<u> </u>			
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	SampT	SampType: LCS Batch ID: 4560			tCode: E	ATILES				
Client ID: LCSS	Batch				RunNo: 6	572				
Prep Date: 10/29/2012	Analysis Date: 10/30/2012			8	SeqNo: 1	90210	Units: %RE	С		
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

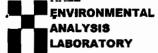
P Sample pH greater than 2

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



4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-410;

Sample Log-In Check List

Website; www.hallenvironmental.com Client Name: RT HICKS Work Order Number: 1210C59 Received by/date: MO Michelle Garcia 10/26/2012 3:42:00 PM Logged By: Completed By: Michelle Garcia 10/29/2012 8:48:10 AM olzaliz Reviewed By: Chain of Custody Yes 🗌 No 🗀 Not Present 1. Were seals intact? Yes 🗹 No 🗌 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Client Log in NA 🖂 Yes 🗸 No 🗌 4. Coolers are present? (see 19. for cooler specific information) **Not Required** NA 🗀 Yes 🔽 No 📙 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 Not required. Temp 8.9 Yes 🗸 No 🗌 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? NA 🗌 Yes 🗌 No 🗹 10. Was preservative added to bottles? Yes 🗌 No 🔲 No VOA Vials 🗹 11. VOA vials have zero headspace? Yes No V 12. Were any sample containers received broken? # of preserved Yes 🗸 No 🗌 13. Does paperwork match bottle labels? bottles checked (Note discrepancies on chain of custody) for pH: Yes 🗹 No 🗌 (<2 or >12 unless noted) 14. Are matrices correctly identified on Chain of Custody? Adjusted? Yes V 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.) Checked by: Special Handling (If applicable) Yes 🗌 No 🗌 NA 🔽 17. Was client notified of all discrepancies with this order? Person Notified: Date: eMail Phone Fax In Person By Whom: Regarding: Client Instructions: 18. Additional remarks:

19. Cooler Information

CONMENTAL ABORATORY al.com s, NM 87109 M5-4107	(1/1 TO V) paidding niA	
VSIS LABORATO environmental.com Albuquerque, NM 87109	A Madathema and themas	
B W W W W W W W W W W W W W W W W W W W	(AOV-imeR) 07S8	
IALL ENVIRON INALYSIS LAB www.hallenvironmental.com ns NE - Albuquerque, NM 5-3975 Fax 505-345-41	8081 Pesticides / 8082 PCB's 8082	
S. S. Length		
YSIS Ifenvironm Albuquer Fax 56	RCRA 8 Metals Anions (F, CI, NO ₃ , NO ₂ , PO ₄ , SO ₄)	
ag	8310 (PNA or PAH) RCRA 8 Metals	
ANAL ANAL www.ha 4901 Hawkins NE Tel. 505-345-3975	EDB (Method 504.1)	
AN www wkins h	(1.814 bodieM) H9T	
Hay 1205	(Gas/Diesel)	
Tel.	BIEX + MIBE + IPH (Gas only)	arks:
	BLEX + MIBE + TMB's (8021)	Remarks
Turn-Around Time:	Container Preservative Type and # Type Los glass	Received by: Date Time Received by: Received by:
Client: RT Hicks Consol Lawls Turn-Around Client: RT Hicks Consol Lawls Project Name Mailing Address: 901 Ris Grande Blydilly Reach Size F-142 Alb. NM & 710 Project #:	Matrix Sample Req	Relinquished by: Relinquished by:
A A A A	Trackage: Package: AP Time Time	Time:
Client: RT.His Mailing Address: 9	Phone #: (\$\frac{1}{12}\) email or Fax#: 0 QA/QC Package: \[\text{GA/QC Package:} \] \[\text{CA/QC Standard} \] \[\text{CA/QC Package:} \] \[\text{Date Time} \] \[\text{Date Time} \] \[\text{CA/QC Package:}	Date: Time: Date: Time:



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

andyl

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 Qu	al 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	ma/Ka	1	11/9/2012 7:03:43 AM

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits 1 of 2

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

Project Name:

1211105

ALBUQUERQUE, NM 87109

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 PQL

Practical Quantitation Limit

Not Detected

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.

Hall Environmental Analysis Laboratory, Inc.

WO#:

1211105 20-Nov-12

Client:

R.T. Hicks Consultants, LTD

15

Project:

Sample ID 1211105-001AMS TestCode: EPA Method 300.0: Anions SampType: MS Client ID: Frio Cuttings Batch ID: 4759 RunNo: 6819 Prep Date: 11/9/2012 Analysis Date: 11/9/2012 SeqNo: 198007 Units: mg/Kg SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Analyte Result PQL LowLimit

18.1 130 Fluoride 2.5 0.30 1.500 2.122 27.4 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 RunNo: 6819 Client ID: Frio Cuttings Batch ID: 4759 Prep Date: 11/9/2012 Analysis Date: 11/9/2012 SeqNo: 198008 Units: mg/Kg SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result PQL LowLimit Analyte 20 2.56 2.5 2.122 18.1 130 Fluoride

7.657

Nitrogen, Nitrate (As N)

0.30 1.500 0.30 7.500 23.1 100

80.1

108

0.559

20

Qualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range

Analyte detected below quantitation limits

Sample pH greater than 2

Analyte detected in the associated Method Blank В

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

RPD outside accepted recovery limits

Page 2 of 2



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

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

Sample Log-In Check List

Client	Name:	RT HICKS		, ,		Vork Ord	ler Nu	mbe	er: 1	2111	05		
İ	ved by/date	11/		11/02/17) 								
	_	17	-1-	11/2/2012	2 4:05:00 PM			,	/ 1	HA			
Logge	· ·	Linday Mang	_					Ĺ	, v	viriaget villaget			
	leted By:	Lindsay Mang	gin	, ,	2 4:13:27 PM			C	9	MAG	•		
Revie	wed By:	0		11/05/	ZO1 Z								
<u>Chair</u>	n of Cust	<u>odv</u>		,									
1. W	Vere seals i	ntact?				Yes	_	10			t Present 🗹		
2. Is	s Chain of C	sustody complet	te?			Yes	V 1	10		Not	Present		
3. H	fow was the	sample deliver	ed?			Clien	<u>t</u>						
Log li	n												
		oresent? (see 1	9. for cooler s	pecific infor	mation)	Yes	✓ N	10			na 🗆		
5. W	Vas an atter	npt made to co	ol the sample	s?		Yes	√ N	No 1			NA 🗀		
6. W	Vere all sam	nples received a	at a temperatu			Yes					NA 🗆		
7 9	ample(e) in	proper contains	ar(e)?	<u>Sar</u>	nples were c		the s		_	y and	chilled.		
• • •		mple volume for	• /	t(s)2			✓ N						
		(except VOA a			ed?		✓ N						
		ative added to b		on, proserv							NA \square		
11 V	/OA vials ha	ve zero headsp	ace?			Yes	□ 1	No.		No V	OA Vials		
		mple containers		ken?		Yes	_			r			
13. D	oes paperv	ork match bottl	e labels?				V		_		# of preserved bottles checked for pH:		
14. A	re matrices	correctly identi	fied on Chain	of Custody?		Yes	V	No.			p	(<2 or >1	2 unless noted)
15, Is	s it clear wh	at analyses wer	e requested?			Yes					Adjuste	d?	
	-	ling times able toustomer for au				Yes	V N	No 1			Checked	l hv:	
		ing (If appli								L			
		otified of all disc		h this order	>	Yes		10			NA 🗹		_
	Person	Notified:			Date:								
	By Who	om:	· · · · · · · · · · · · · · · · · · ·		Via:	eMai		Pho	one	∏ Fa	ax In Perso	on	
	Regardi	ing:											
	Client Ir	nstructions:]
18. A	dditional re	marks:											
19. <u>C</u>	Cooler Infor		Condition	Seal Intact	Seal No	Seal Dat	e I	ç	Signe	d By	1		
-	1			ot Present	SCALINO	Ceal Dai			rigire	<u>u <i>D</i>y</u>			
											_		