

R. T. HICKS CONSULTANTS, LTD.

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

October 14, 2014

Mr. Solomon Hughes
Bureau of Land Management
620 E. Greene St
Carlsbad, NM 88220
Via E-mail

Mr. Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, New Mexico 88210
Via E-mail and US Mail

RE: Southwest Royalties North Hackberry Yates Well #105

Dear Mr. Hughes and Mr. Bratcher:

Southwest Royalties asked Hicks Consultants to conduct the final sampling event prior to implementing the proposed remedy. Prior to sampling, we were told that Hungry Horse had removed additional material to disposal and stockpiled earth for backfilling. Due to these efforts, the site meet standards for burial and the proposed remedy is presented on the last page of this submittal. Previous submittals show that depth to groundwater is more than 50 feet.

Sampling Results

Plate 1 presents the locations of the samples collected on September 23, 2014. Table 1 presents the results of the sampling and the laboratory reports are attached to this submittal as well. Please note that the latitude and longitude obtained by the hand-held GPS is accurate to about 30 feet plus/minus. The locations on Plate 1 have been adjusted to reflect the actual sampling locations.

Sample Name	Chloride	DRO	MRO	GRO	DRO +	TPH	BTEX	Lat	Long
					GRO				
	all units mg/kg								
PL-1-C	ND							32.64651	-103.93674
PL-1-N	1900								
PL-1-S	ND								
PL2-C								32.64651	-103.93687
PL-2-N	58	ND	ND	ND			ND		
PL-2-S	ND								
PL-3-C	4200	ND	ND	ND			ND	32.64653	-103.93702
PL-3-N	370								
PL-3-S	ND								
PL-4-C	ND	ND	ND	ND			ND	32.64651	-103.93713
PL-4-N	470								
PL-4-S	510								
S-1	260							32.64646	-103.93655
S-2	ND							32.64634	-103.93655
S-3	ND							32.64621	-103.93642
S-4	ND							32.64663	-103.93649
West Stockpile	880								
East Stockpile	410								
Pit Rule Standards	10,000				1,000	2,500	50		

The Pit Rule Standards presented in Table 1 represent concentrations that are acceptable for burial beneath a 4-foot soil cover without a geomembrane cover (Table 1 of the Pit Rule). The NMOCD

chloride standard for the soil cover is 600 mg/kg and the BLM standard for a surface soil is 1,000 mg/kg. While both soil stockpiles meet the BLM standard for surface soil, the west soil stockpile meets the OCD standard for burial beneath the 4-foot soil cover but does not meet the 600 mg/kg standard for surface soil. The remedy addresses this issue.

Sampling Methods

The photograph below (left) shows the sampling methodology (from PL-3). The pipeline is exposed in the middle of the trench and the central samples were taken from beneath the exposed pipeline. The sample in the background is PL3-N, which is 4-feet below the natural grade. Not shown in this photograph is PL3-S, also 4-feet below natural grade. At this sampling site, chloride concentration meets the OCD standard for burial beneath a 4-foot soil cover (PL3-C) and also the standard for the soil cover from 0-4 feet below grade (PL3-S and PL3-N).



The photograph to the right shows the sampling at PL4. This location is obviously not over the pipeline but is within the flow path of the leak. The photograph below shows that the same



same sampling methodology was used: one sample from the center of the trench that is more than 4-feet beneath the natural grade and two samples from either side of the trench that lie within the 0-4 foot zone below grade.

Discussion

The sampling results from September and earlier campaigns clearly show that petroleum hydrocarbons are not present at the site. The soils impacted by the crude spill have been removed to disposal.

The results also show that the soil material remaining within the area of impact (the trench) meet the standards for burial beneath a 4-foot soil cover (10,000 mg/kg from Table 1 of Pit Rule) or meet the standards for “no action” (600 mg/kg chloride).

October 13, 2014

Page 4

Because the west stockpile material will be placed in the trench beneath a 4-foot soil cover, we believe the remedy meets all OCD and BLM criteria for closure.

Southwest Royalties would like to proceed with the remedy as soon as possible. However, we understand that OCD has several permit reviews in line ahead of this submittal and their "first-in/first-out" policy may cause the review of this submittal to be complete in November or later.

Please contact me if you have any questions regarding the results or the proposed final remedy.

Sincerely,
R.T. Hicks Consultants

A handwritten signature in black ink, appearing to read "Randall Hicks". The signature is written in a cursive style with a large initial "R".

Randall Hicks

Copy: Southwest Royalties

Remedy Instruction to Contractor

1. Distribute the soil in the West Stockpile in the excavation such that it lies more than 4-feet below the natural grade.
2. Also, as a voluntary effort, place the surface asphaltic material that is near the release footprint into the trench such that it lies more than 4-feet below natural grade
3. If the trench is filled to within 4-feet of natural grade and soil in the West Stockpile remains, blend one part of the remaining soil in the West Stockpile with 2 parts soil from the East Stockpile in the following manner
 - a. Place no more than 1.3 feet of soil from the West Stockpile in the bottom of the trench
 - b. Place at least 2.7 feet of soil from the East Stockpile in the trench over the soil from the West Stockpile
 - c. Obtain a composite sample of the 4-foot soil cover to confirm that the material meets the OCD standard of 600 mg/kg
4. Borrow clean sand from adjacent to the release footprint as required to restore the natural topography.
5. As a voluntary effort, restore the original drainage pattern by moving small volumes of sand to create a channel and dune (see Plate 1).

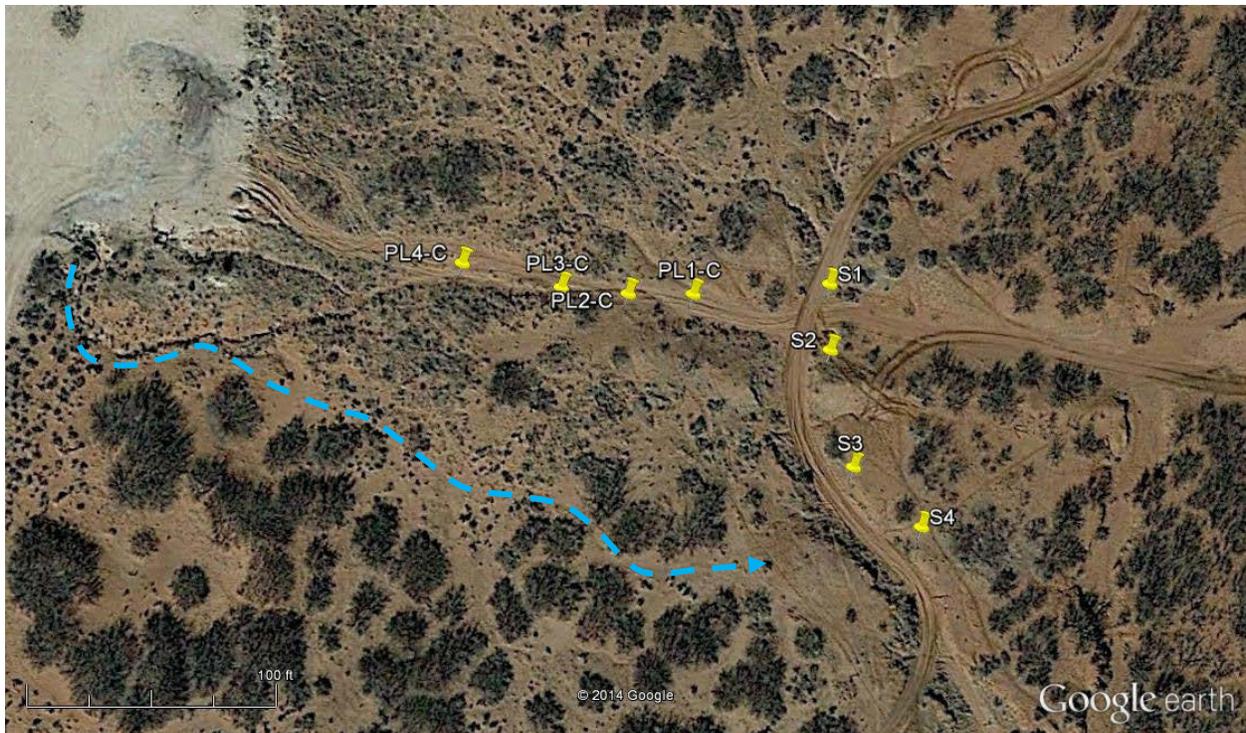


Plate 1: Google Earth image showing sample locations and drainage pattern to be re-established (dashed blue line). The original drainage is visible in the 10/21/96 Google Earth image.



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

October 01, 2014

Randall Hicks

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: North Hackberry Yates 105

OrderNo.: 1409D42

Dear Randall Hicks:

Hall Environmental Analysis Laboratory received 6 sample(s) on 9/26/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order: 1409D42

Date Reported: 10/1/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Project: North Hackberry Yates 105

Lab Order: 1409D42

Lab ID: 1409D42-001 Collection Date: 9/25/2014 10:32:00 AM

Client Sample ID: West Stockpile Matrix: SOIL

Analyses Result RL Qual Units DF Date Analyzed Batch ID

EPA METHOD 300.0: ANIONS

Analyst: LGP

Chloride 880 30 mg/Kg 20 9/29/2014 6:31:22 PM 15595

Lab ID: 1409D42-002 Collection Date: 9/25/2014 10:12:00 AM

Client Sample ID: East Stockpile Matrix: SOIL

Analyses Result RL Qual Units DF Date Analyzed Batch ID

EPA METHOD 300.0: ANIONS

Analyst: LGP

Chloride 410 30 mg/Kg 20 9/29/2014 6:43:46 PM 15595

Lab ID: 1409D42-003 Collection Date: 9/25/2014 9:08:00 AM

Client Sample ID: S-1 Matrix: SOIL

Analyses Result RL Qual Units DF Date Analyzed Batch ID

EPA METHOD 300.0: ANIONS

Analyst: LGP

Chloride 260 30 mg/Kg 20 9/29/2014 6:56:10 PM 15595

Lab ID: 1409D42-004 Collection Date: 9/25/2014 9:10:00 AM

Client Sample ID: S-2 Matrix: SOIL

Analyses Result RL Qual Units DF Date Analyzed Batch ID

EPA METHOD 300.0: ANIONS

Analyst: LGP

Chloride ND 30 mg/Kg 20 9/29/2014 7:08:35 PM 15595

Lab ID: 1409D42-005 Collection Date: 9/25/2014 9:12:00 AM

Client Sample ID: S-4 Matrix: SOIL

Analyses Result RL Qual Units DF Date Analyzed Batch ID

EPA METHOD 300.0: ANIONS

Analyst: LGP

Chloride ND 30 mg/Kg 20 9/29/2014 7:45:48 PM 15595

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

- Qualifiers: * Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

Analytical Report

Lab Order: **1409D42**

Date Reported: **10/1/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Project: North Hackberry Yates 105

Lab Order: 1409D42

Lab ID: 1409D42-006

Collection Date: 9/25/2014 9:13:00 AM

Client Sample ID: S-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
-----------------	---------------	-----------	-------------	--------------	-----------	----------------------	-----------------

EPA METHOD 300.0: ANIONS

Analyst: **LGP**

Chloride	ND	30		mg/Kg	20	9/29/2014 7:58:12 PM	15595
----------	----	----	--	-------	----	----------------------	-------

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409D42

01-Oct-14

Client: R.T. Hicks Consultants, LTD

Project: North Hackberry Yates 105

Sample ID	MB-15595	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	15595	RunNo:	21544					
Prep Date:	9/29/2014	Analysis Date:	9/29/2014	SeqNo:	630734	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-15595	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	15595	RunNo:	21544					
Prep Date:	9/29/2014	Analysis Date:	9/29/2014	SeqNo:	630735	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

Qualifiers:

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

Client Name: RT HICKS

Work Order Number: 1409D42

RcptNo: 1

Received by/date: AF 09/26/14

Logged By: Lindsay Mangin 9/26/2014 10:48:00 AM *[Signature]*

Completed By: Lindsay Mangin 9/26/2014 12:23:02 PM *[Signature]*

Reviewed By: *MG 09/26/14*

Chain of Custody

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

Log In

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

Approved by client

of preserved bottles checked for pH: _____
 (<2 or >12 unless noted)
 Adjusted? _____
 Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
 By Whom: _____ Via: eMail Phone Fax In Person
 Regarding: _____
 Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	10.1	Good	Not Present			



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

October 01, 2014

Randall Hicks

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: North Hackberry Yates 105

OrderNo.: 1409D40

Dear Randall Hicks:

Hall Environmental Analysis Laboratory received 12 sample(s) on 9/26/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409D40

Date Reported: 10/1/2014

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-1 S

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 9:31:00 AM

Lab ID: 1409D40-001

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	ND	30		mg/Kg	20	9/29/2014 3:12:49 PM	15595

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409D40

Date Reported: 10/1/2014

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-1 Center

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 9:29:00 AM

Lab ID: 1409D40-002

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	ND	30		mg/Kg	20	9/29/2014 3:50:03 PM	15595

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1409D40**

Date Reported: **10/1/2014**

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-1 North

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 9:31:00 AM

Lab ID: 1409D40-003

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	1900	75		mg/Kg	50	10/1/2014 12:37:45 AM	15595

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	Page 3 of 16
	O RSD is greater than RSDlimit	P Sample pH greater than 2.	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409D40

Date Reported: 10/1/2014

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-2 North

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 9:33:00 AM

Lab ID: 1409D40-004

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	58	30		mg/Kg	20	9/29/2014 4:14:52 PM	15595

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409D40

Date Reported: 10/1/2014

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-2 Center

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 9:35:00 AM

Lab ID: 1409D40-005

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/29/2014 1:31:20 PM	15534
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/29/2014 1:31:20 PM	15534
Surr: DNOP	110	57.9-140		%REC	1	9/29/2014 1:31:20 PM	15534
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2014 5:31:02 PM	15551
Surr: BFB	89.8	80-120		%REC	1	9/28/2014 5:31:02 PM	15551
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	9/28/2014 5:31:02 PM	15551
Toluene	ND	0.049		mg/Kg	1	9/28/2014 5:31:02 PM	15551
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2014 5:31:02 PM	15551
Xylenes, Total	ND	0.098		mg/Kg	1	9/28/2014 5:31:02 PM	15551
Surr: 4-Bromofluorobenzene	93.2	80-120		%REC	1	9/28/2014 5:31:02 PM	15551
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	52	30		mg/Kg	20	9/29/2014 4:27:16 PM	15595

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409D40

Date Reported: 10/1/2014

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-2 South

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 9:36:00 AM

Lab ID: 1409D40-006

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	ND	30		mg/Kg	20	9/29/2014 4:39:41 PM	15595

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409D40

Date Reported: 10/1/2014

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-3 North

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 9:46:00 AM

Lab ID: 1409D40-007

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	370	30		mg/Kg	20	9/29/2014 5:16:54 PM	15595

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409D40

Date Reported: 10/1/2014

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-3 Center

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 9:48:00 AM

Lab ID: 1409D40-008

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/29/2014 2:01:38 PM	15534
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/29/2014 2:01:38 PM	15534
Surr: DNOP	105	57.9-140		%REC	1	9/29/2014 2:01:38 PM	15534
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/28/2014 5:59:36 PM	15551
Surr: BFB	90.6	80-120		%REC	1	9/28/2014 5:59:36 PM	15551
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	9/28/2014 5:59:36 PM	15551
Toluene	ND	0.048		mg/Kg	1	9/28/2014 5:59:36 PM	15551
Ethylbenzene	ND	0.048		mg/Kg	1	9/28/2014 5:59:36 PM	15551
Xylenes, Total	ND	0.095		mg/Kg	1	9/28/2014 5:59:36 PM	15551
Surr: 4-Bromofluorobenzene	94.4	80-120		%REC	1	9/28/2014 5:59:36 PM	15551
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	4200	750		mg/Kg	500	10/1/2014 12:50:10 AM	15595

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409D40

Date Reported: 10/1/2014

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-3 South

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 9:50:00 AM

Lab ID: 1409D40-009

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	ND	30		mg/Kg	20	9/29/2014 5:41:43 PM	15595

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	Page 9 of 16
	O RSD is greater than RSDlimit	P Sample pH greater than 2.	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409D40

Date Reported: 10/1/2014

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-4 North

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 9:54:00 AM

Lab ID: 1409D40-010

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	470	30		mg/Kg	20	9/29/2014 5:54:08 PM	15595

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409D40

Date Reported: 10/1/2014

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-4 Center

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 9:57:00 AM

Lab ID: 1409D40-011

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/29/2014 2:32:05 PM	15534
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/29/2014 2:32:05 PM	15534
Surr: DNOP	105	57.9-140		%REC	1	9/29/2014 2:32:05 PM	15534
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2014 6:28:17 PM	15551
Surr: BFB	90.2	80-120		%REC	1	9/28/2014 6:28:17 PM	15551
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	9/28/2014 6:28:17 PM	15551
Toluene	ND	0.049		mg/Kg	1	9/28/2014 6:28:17 PM	15551
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2014 6:28:17 PM	15551
Xylenes, Total	ND	0.097		mg/Kg	1	9/28/2014 6:28:17 PM	15551
Surr: 4-Bromofluorobenzene	93.3	80-120		%REC	1	9/28/2014 6:28:17 PM	15551
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	ND	30		mg/Kg	20	9/29/2014 6:06:33 PM	15595

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409D40

Date Reported: 10/1/2014

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: PL-4 South

Project: North Hackberry Yates 105

Collection Date: 9/25/2014 10:01:00 AM

Lab ID: 1409D40-012

Matrix: SOIL

Received Date: 9/26/2014 10:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	510	30		mg/Kg	20	9/29/2014 6:18:57 PM	15595

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409D40

01-Oct-14

Client: R.T. Hicks Consultants, LTD

Project: North Hackberry Yates 105

Sample ID	MB-15595	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	15595	RunNo:	21544					
Prep Date:	9/29/2014	Analysis Date:	9/29/2014	SeqNo:	630734	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-15595	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	15595	RunNo:	21544					
Prep Date:	9/29/2014	Analysis Date:	9/29/2014	SeqNo:	630735	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409D40

01-Oct-14

Client: R.T. Hicks Consultants, LTD

Project: North Hackberry Yates 105

Sample ID MB-15534	SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range Organics							
Client ID: PBS	Batch ID: 15534		RunNo: 21518							
Prep Date: 9/26/2014	Analysis Date: 9/29/2014		SeqNo: 630645	Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	57.9	140			

Sample ID LCS-15534	SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 15534		RunNo: 21518							
Prep Date: 9/26/2014	Analysis Date: 9/29/2014		SeqNo: 630646	Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.7	68.6	130			
Surr: DNOP	4.8		5.000		95.7	57.9	140			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409D40

01-Oct-14

Client: R.T. Hicks Consultants, LTD

Project: North Hackberry Yates 105

Sample ID MB-15551	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 15551		RunNo: 21502							
Prep Date: 9/26/2014	Analysis Date: 9/28/2014		SeqNo: 628928		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		89.7	80	120			

Sample ID LCS-15551	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 15551		RunNo: 21502							
Prep Date: 9/26/2014	Analysis Date: 9/28/2014		SeqNo: 628929		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	65.8	139			
Surr: BFB	940		1000		94.5	80	120			

Sample ID MB-15551 MK	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: R21502		RunNo: 21502							
Prep Date:	Analysis Date: 9/28/2014		SeqNo: 628939		Units: %REC					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		89.7	80	120			

Sample ID LCS-15551 MK	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: R21502		RunNo: 21502							
Prep Date:	Analysis Date: 9/28/2014		SeqNo: 628940		Units: %REC					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.5	80	120			

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: R21524		RunNo: 21524							
Prep Date:	Analysis Date: 9/29/2014		SeqNo: 629693		Units: %REC					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	880		1000		87.7	80	120			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: R21524		RunNo: 21524							
Prep Date:	Analysis Date: 9/29/2014		SeqNo: 629694		Units: %REC					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		96.1	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409D40

01-Oct-14

Client: R.T. Hicks Consultants, LTD

Project: North Hackberry Yates 105

Sample ID	MB-15551	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	15551	RunNo:	21502					
Prep Date:	9/26/2014	Analysis Date:	9/28/2014	SeqNo:	628956	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		93.3	80	120			

Sample ID	LCS-15551	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	15551	RunNo:	21502					
Prep Date:	9/26/2014	Analysis Date:	9/28/2014	SeqNo:	628957	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	98.0	80	120			
Toluene	0.97	0.050	1.000	0	96.7	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.3	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Qualifiers:

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

Client Name: RT HICKS

Work Order Number: 1409D40

RcptNo: 1

Received by/date: AF 09/26/14

Logged By: Lindsay Mangin 9/26/2014 10:48:00 AM *[Signature]*

Completed By: Lindsay Mangin 9/26/2014 12:14:19 PM *[Signature]*

Reviewed By: mg 09/26/14

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: eMail Phone Fax In Person

Regarding: _____

Client Instructions: _____

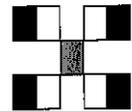
17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	10.1	Good	Not Present			

Chain-of-Custody Record

Turn-Around Time:



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BTEX + MTBE + TMB's (8021)	BTEX	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride
----------------------------	------	-----------------------------	--------------------	--------------------	---------------------------	---------------	--	------------------------------	-------------	-----------------	----------

Project Name: NORTH HAZARDRY YATES 105

Project #: SPILL

Project Manager: RTA

Sampler: 10

On Ice: Yes No

Sample Temperature: 10

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
9/25/14	931	Soil	PL-1 Center S	1 Glass		1209210
	929		PL-1 Center	"		-001
	931		PL-1 NORTH	"		-002
	933		PL-2 NORTH	"		-003
	935		PL-2 Center	"		-004
	936		PL-2 South	"		-005
	946		PL 3 - NORTH	"		-006
	948		PL 3 - Center	"		-007
	950		PL 3 South	"		-008
	954		PL-4 NORTH	"		-009
	957		PL 4 Center	"		-010
	10:01		PL 4 - South	"		-011

Client: RTA

Mailing Address: HICKS CONSULTING

Phone #: 238-9575

email or Fax#: ReThicksconsult

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

Accreditation: NELAP Other

EDD (Type)

Received by: [Signature] Date: 9/26/14 Time: 10:48

Relinquished by: [Signature] Date: 9/26/14 Time: 10:48

Remarks:

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