# R. T. HICKS CONSULTANTS, LTD.

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

December 12, 2014

Mr. Soloman 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 Revision #2

Dear Mr. Hughes and Mr. Bratcher:

This revised final remediation proposal presents the results of the recent vertical investigation. It supersedes and simplifies previous communications.

### **Sampling Results**

Plate 1 presents the locations of the samples collected on September 23, 2014 and December 4, 2014. Table 1 presents the results of the sampling and the laboratory reports are attached to this submittal as well. On December 4, 2014, we collected vertical delineation samples (PL-1-N and PL-3-C) and a sample of the asphalt hardpan.

						DRO+		
		Chloride	DRO	MRO	GRO	GRO	TPH	BTEX
Sample Name	<b>Collection Date</b>			all u	units m	g/kg		
Asphalt Hardpan	12/4/2014		170	1000	nd			
PL-1-C	9/25/2014	0						
PL-1-N	9/25/2014	1900						
PL-1-N 1.5	12/4/2014	39						
PL-1-N-3.0 ft	12/4/14/	ND						
PL-1-S	9/25/2014	0						
PL-2-C	9/25/2014	0	ND	ND	ND			
PL-2-N	9/25/2014	58	ND	ND	ND			ND
PL-2-S	9/25/2014	0						
PL-3-C	9/25/2014	4200	ND	ND	ND			ND
PL-3-C-1.5	12/4/2014	190						
PL-3-C-3.0 feet	12/4/2014	ND						
PL-3-N	9/25/2014	370						
PL-3-S	9/25/2014	0						
PL-4-C	9/25/2014	0	ND	ND	ND			ND
PL-4-N	9/25/2014	470						
PL-4-S	9/25/2014	510						
S-1	9/25/2014	260						
S-2	9/25/2014	ND						
S-3	9/25/2014	ND						
S-4	9/25/2014	ND						
Stockpile East	9/25/2014	410						
Stockpile West	9/25/2014	880						

## **Sampling Methods**

The photograph below (left) shows the sampling methodology (from PL-3-C). The sample locations of September 25 were obvious due to residual flagging and sample excavations.

December 12, 2014 Page 3

As shown, we used a post-hole digger to collect samples 1.5 and 3.0 feet below the September



Although the release is proximal to a watercourse, the 4-foot burial of the west stockpile effectively isolates this material from the environment. The 4foot burial of the asphalt hardpan will also isolate

samples at the two locations that showed relatively high chloride concentrations.

### Discussion

The sampling results from September and earlier campaigns show that petroleum hydrocarbons are not present in samples potentially impacted by the recent release. The soils impacted by the 2014 crude spill have been removed to disposal – with the exception of the west stockpile that exhibits chloride less than 1000 mg/kg.

The sample of asphalt hardpan (photograph below) has a TPH concentration of 1170 mg/kg and DRO+GRO of 1170.



this material from the environment. As groundwater is at least 40-feet below the arroyo bottom, the burial of the hardpan about 30-feet above the arroyo (i.e. adjacent to the production pad) creates a distance of about 70 feet between the burial and the groundwater surface. Given the proximity and age of the up gradient potash tailings pond, the probability that alluvial groundwater is significantly impaired by pond leakage is very high.

### **Proposed Remedy**

Southwest Royalties would like to proceed with the remedy described in the attachment as soon as possible.

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

Sincerely, R.T. Hicks Consultants

Randall Hicks

Copy: Southwest Royalties

## **Remedy Instruction to Contractor**

- 1. Distribute the soil in the West Stockpile in the excavation such that it will rest more than 4-feet below the final grade after restoration.
- 2. If approved by OCD and BLM, 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 final grade and soil in the West Stockpile remains, remove the stockpile to disposal.
- 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).
- 6. Seed the site employing the mixture approved/recommended by BLM.

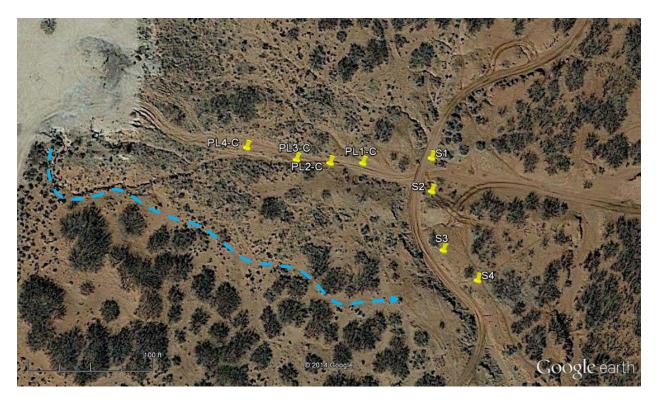


Plate 1: Google Earth image showing sample locations and drainage pattern to be re-established (dashed blue line). The original drainage is visible in the 10/21/96 Google Earth image.



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

December 10, 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: SWR North Hackberry 105

OrderNo.: 1412311

Dear Randall Hicks:

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

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

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

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

Sincerely,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysi	s Laborat	ory, Inc.		Lab Order <b>1412311</b> Date Reported: <b>12/10/2</b>	2014
CLIENT: R.T. Hicks Consultants, LTD			Client Sampl	e <b>ID:</b> PL-1-N-1.5	
<b>Project:</b> SWR North Hackberry 105			Collection I	Date: 12/4/2014 12:16:00 PM	
<b>Lab ID:</b> 1412311-001	Matrix: S	OIL	Received l	Date: 12/5/2014 1:00:00 PM	
Analyses	Result	RL Qua	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Analys	t: LGP
Chloride	39	30	mg/Kg	20 12/8/2014 11:43:19 AM	/ 16713

		-	•			U	00	-		
Qualifiers:	*	Value exc	ceeds Ma	ximum Co	ontaminant Le	evel.	В	Analyte d	etected in the associa	ated Method

- E Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank В

- Holding times for preparation or analysis exceeded Η
- ND Not Detected at the Reporting Limit Page 1 of 8
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysi	s Laborat	ory, Inc.			Lab Order <b>1412311</b> Date Reported: <b>12/1</b> 0	)/2014
CLIENT: R.T. Hicks Consultants, LTD		1	Client Sampl	e ID: PL-1	I-N-3	
<b>Project:</b> SWR North Hackberry 105			Collection I	Date: 12/4	/2014 12:18:00 PN	1
<b>Lab ID:</b> 1412311-002	Matrix: S	OIL	Received I	Date: 12/5	/2014 1:00:00 PM	
Analyses	Result	RL Qua	l Units	DF I	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	/st: LGP
Chloride	ND	30	mg/Kg	20	12/8/2014 12:08:09 F	PM 16713

		-	-	-	•		_	-
Qualifiers:	*	Value exceeds Ma	ximum Contami	inant Le	evel.	В	Analyte detected	in the associated Method

- E Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank В
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit Page 2 of 8

- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysi	s Laborat	ory, Inc.			rder 1412311 Reported: 12/10	)/2014
CLIENT: R.T. Hicks Consultants, LTD			Client Sampl	e ID: PL-3-C-1	.5	
<b>Project:</b> SWR North Hackberry 105			Collection I	Date: 12/4/2014	12:24:00 PN	Л
<b>Lab ID:</b> 1412311-003	Matrix: S	OIL	Received I	Date: 12/5/2014	1:00:00 PM	
Analyses	Result	RL Qu	al Units	DF Date A	Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	/st: LGP
Chloride	190	30	mg/Kg	20 12/8/2	2014 12:20:34 F	PM 16713

		-	• •				-	
Qualifiers:	*	Value exc	eeds Maximum Co	ontaminant Level.	В	Analyte de	etected in the associa	ted Metho

- E Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank В

**Analytical Report** 

Holding times for preparation or analysis exceeded Н

Page 3 of 8

- ND Not Detected at the Reporting Limit
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analys	sis Laborat	ory, Inc.		Lab Order 1 Date Repor	1412311 ted: 12/10/20	)14
CLIENT: R.T. Hicks Consultants, LTD	)		Client Sampl	<b>e ID:</b> PL-3-C-3		
<b>Project:</b> SWR North Hackberry 105			Collection 1	Date: 12/4/2014 12:	27:00 PM	
Lab ID: 1412311-004	Matrix: S	OIL	<b>Received</b>	Date: 12/5/2014 1:0	0:00 PM	
Analyses	Result	RL Qu	al Units	DF Date Anal	yzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	LGP
Chloride	ND	30	mg/Kg	20 12/8/2014	12:32:59 PM	16713

		-	-	-	•		_	-
Qualifiers:	*	Value exceeds Ma	ximum Contami	inant Le	evel.	В	Analyte detected	in the associated Method

- E Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank В

- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit Page 4 of 8
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Analytical Report
Lab Order 1412311

Date Reported: 12/10/2014

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD

**Project:** SWR North Hackberry 105

Client Sample ID: ASPHALT HARDPAN Collection Date: 12/4/2014 12:16:00 PM Received Date: 12/5/2014 1:00:00 PM

Lab ID: 1412311-005	Matrix:	SOIL		Received I	Date: 12/	12/5/2014 1:00:00 PM		
Analyses	Result	RL (	Qual	Units	DF	Date Analyzed	Batch	
EPA METHOD 8015D: DIESEL RANG	E ORGANICS					Anal	yst: BCN	
Diesel Range Organics (DRO)	170	99		mg/Kg	10	12/8/2014 12:25:23	PM 16709	
Motor Oil Range Organics (MRO)	1000	490		mg/Kg	10	12/8/2014 12:25:23	PM 16709	
Surr: DNOP	0	63.5-128	S	%REC	10	12/8/2014 12:25:23	PM 16709	
EPA METHOD 8015D: GASOLINE RA	NGE					Anal	yst: <b>NSB</b>	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/8/2014 11:39:08	AM 16689	
Surr: BFB	89.9	80-120		%REC	1	12/8/2014 11:39:08	AM 16689	

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	A
	Е	Value above quantitation range	Н	H
	J	Analyte detected below quantitation limits	ND	N
	0	RSD is greater than RSDlimit	Р	Sa
	R	RPD outside accepted recovery limits	RL	Re

- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
  - D Not Detected at the Reporting Limit Page 5 of 8
- P Sample pH greater than 2.
- RL Reporting Detection Limit

1412311	WO#:
10-Dec-14	

Client: Project:		Hicks Consultants North Hackberry	,						
Sample ID	MB-16713	SampType	: MBLK	Tes	tCode: EPA Met	hod 300.0: Anio	ns		
Client ID: F	PBS	Batch ID:	16713	F	RunNo: <b>23009</b>				
Prep Date:	12/8/2014	Analysis Date:	12/8/2014	S	SeqNo: 679787	Units: mg/	Kg		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC LowL	mit HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5						
Sample ID	_CS-16713	SampType	LCS	Tes	tCode: EPA Met	hod 300.0: Anio	ns		
Client ID:	CSS	Batch ID:	16713	F	RunNo: <b>23009</b>				
Prep Date:	12/8/2014	Analysis Date:	12/8/2014	S	SeqNo: 679788	Units: <b>mg</b> /	Kg		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC LowL	mit HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5 15.00	0	92.4	90 110			

- \* 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

WO#:	1412311

10-Dec-14

	cks Consulta orth Hackbe	,								
Sample ID MB-16709	•	ype: ME					8015D: Diese	el Range C	Organics	
Client ID: PBS	Batch	ID: 167	709	F	RunNo: 2	2978				
Prep Date: 12/8/2014	Analysis D	ate: 12	2/8/2014	5	SeqNo: 6	78888	Units: <b>mg/K</b>	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	6.8		10.00		68.1	63.5	128			
Sample ID LCS-16709	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D: Diese	el Range C	Organics	
Client ID: LCSS	Batch	ID: 167	709	F	RunNo: <b>2</b> :	2978				
Prep Date: 12/8/2014	Analysis D	ate: 12	2/8/2014	S	SeqNo: 6	78889	Units: <b>mg/K</b>	ģ		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.3	68.6	130			
Surr: DNOP	3.9		5.000		78.4	63.5	128			

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

		R.T. Hicks Consultants, LTD SWR North Hackberry 105								
Sample ID MB-16689	SampTy	vpe: ME	BLK	Tes	tCode: El	PA Method	8015D: Gasc	line Rang	e	
Client ID: PBS	Batch	ID: 16	689	F	RunNo: 2	2986				
Prep Date: 12/5/2014	Analysis Da	ate: 12	2/8/2014	S	SeqNo: 6	79318	Units: <b>mg/k</b>	(g		
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		89.8	80	120			
Sample ID LCS-16689	SampTy	vpe: LC	S	Tes	tCode: El	PA Method	8015D: Gasc	line Rang	e	
Client ID: LCSS	Batch	ID: 16	689	F	RunNo: 2	2986				
Prep Date: 12/5/2014	Analysis Da	ate: 12	2/8/2014	S	SeqNo: 6	79319	Units: <b>mg/</b> #	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.4	65.8	139			
Surr: BFB	980		1000		97.7	80	120			

- \* 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

ENVIRONMENTAL ANALYSIS ADDRATORY	ll Environmental Analysis Labor 4901 Hawkin Albuquerque, NM 8 L: 505-345-3975 FAX: 505-345- Website: www.hallenvironmental	<sup>as NE</sup> 87105 <b>Samj</b> 4107	ole Log-In Check List
Client Name: RT HICKS Work	Order Number: 1412311		RcptNo: 1
Received by/date: CS 12(05	1,4		
·	14 1:00:00 PM	Celin S Celin S	ma
Completed By: Celina Sessa 12/5/20	14 1:10:34 PM	Celina S	-
Reviewed By: Art 12/05/14			
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		
<u>Log In</u>			
4. Was an attempt made to cool the samples?	Yes 🔽	Νο	
5. Were all samples received at a temperature of $>0^{\circ}$ (	C to 6.0°C Yes 🗹	No 🗌	
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 preser	ved? 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 🗹	# of preserved bottles checked
12.Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No 🗍	for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody		No 🗌	Adjusted?
14. Is it clear what analyses were requested?	Yes 🔽	No 🗌	Observed bur
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No	Checked by:
Special Handling (if applicable)			
16. Was client notified of all discrepancies with this orde	r? Yes 🗆	No 🗌	NA 🗹
Person Notified:	Date:		
By Whom:	Via: 🗌 eMail 🗌	Phone 🗌 Fax	In Person
Regarding:			
Client Instructions:			
17. Additional remarks:			
18. <u>Cooler Information</u> <u>Cooler No</u> Temp °C Condition Seal Intac 1 3.8 Good Not Presen	t <mark>  Seal No   Seal Date  </mark> t	Signed By	

Client:     P. T. H. L.K.     T Standard     District     Distrit     Distrit     District <thdi< th=""><th>Chain-of-Custody Record</th><th>I urn-Around I me:</th><th></th><th></th><th>1</th><th>ALI</th><th></th><th></th><th>RO</th><th>Z</th><th>IEN</th><th>TAL</th><th></th></thdi<>	Chain-of-Custody Record	I urn-Around I me:			1	ALI			RO	Z	IEN	TAL	
Project Manne:     Project Manne:       S. J. C. NCC/TH, HALCEGRY 15     S. Monthallen/formentation       S. J. C. NCC/TH, HALCEGRY 15     S. Monthallen/formentation       S. J. C. NCC/TH, HALCEGRY 15     S. Monthallen/formentation       Matrix     Sample:     Project Manager:       A. M. Strong     S. Monthallen/formentation     Soft Section (NOA)       Matrix     Sample:     Project Manager:       A. M. Sample:     Project Manager:     Project Manager:       Matrix     Sample:     Containe:     Scole (NOA)       Matrix     Sample:     Project Manager:     Project Manager:       Matrix     Sample:     Project Manager:     Project Manager:       Dillos:     Dillos:     Non-     Dollos:     Scole (NOA)       Dillos:     Project Manager:     Project Manager:     Project Manager:       Matrix     Sample:     Project Manager:     Project Manager:       Dillos:     Project Manager:     Project Manager:     Project Manager:       A. M. Project Manager:     Project Manager:     Project Manager:     Project Manager:       Matrix     Sample:     Project Manager:     Project Manager:     Project Manager:       Matrix     Sample:     Project Manager:     Project Manager:     Project Manager:       Matrix     Pr	.T. HICKS					NA		IS	S	<b>N</b>	RAT	OR	<u> </u>
8     2001, Vock Int (routback) U     4901 Hawkins NE - Albruneque NN 97103       1     1     2001, Vock Int (routback) U     4901 Hawkins NE - Albruneque NN 97103       1     1     1     1     1       1     1     1     1     1       1     1     1     1     1     1       1     1     1     1     1     1       1     1     1     1     1     1       1     1     1     1     1     1       1     1     1     1     1     1       1     1     1     1     1     1     1       1     1     1     1     1     1     1       1     1     1     1     1     1     1       1     1     1     1     1     1     1       1     1     1     1     1     1     1       1     1     1     1     1     1     1       1     1     1     1     1     1     1       1     1     1     1     1     1     1       1     1     1     1     1     1     1		-				www.h	allenvir	onme	ental.c	Ш			
Project #:     Tel. 505-32 % - 73 / T       Project #:     Ref CrithLibscurscult (err)       Project #:     Ref CrithLibscurscult       Project #:     Project #:       Project #:     Project #:       Project #:     Project #:       Project #:     Project #:       Project #:     Project	Mailing Address:	Z_		4901	Hawkii	ns NE		Idnerc	ţue, N	M 87.	601		
Analysis     Reference     <		Project #:		Tel.	505-34	5-3975			5-345	-4107			
Recrthuckcarkcult (Arthound Standage:     0       Matrix     Sample       Recrthuckcarkcult     0       Sample     Sample       Sample     <	505-238-951 C						Analys	sis Re	sənbə				
Container     Sample       Reiner     Container       Reiner     Nove       Reine	Rerthickscursult. 1247	Project Manager:		(ʎju	TO								
Differ     Sampler:     Over       Differ     Sampler:     Over       Sampler:     Onlos:     Xess       Differ     Sampler     Sampler       Sampler     Fease     No       Sampler     Sampler     Sampler       Sampler     Fease     No       Sampler     Fease     Sampler       Samprer     Fease     San		- Ala		o 28Đ)		(SMIS					-02F		
Diller     Onlos:     Wess     DNo       Sample Request ID     Sample Request ID     Sample Request ID     Sample Request ID       Natrix     Sample Request ID     Type and #     Type       Sint Pasticides I     Container     PL-1-N-1LS     Stop 88110660       PL-3-C-1     Novel     ED8 (Method 50A       PL-3-C-1     Novel     ED8 (Method 50A       PL-3-C-1     Novel     EC6A 8 Meths       Reference     PL-3-C-1     Novel       PL-3-C-1     Novel     EC6A 8 Meths       PL-3-C-2     Novel     ED8 (Method 60A       PL-3-C-3     Novel     Novel       PL-3-C-3     Novel     Novel       PL-3-C-3     Novel     Novel       PL-3-C-	2 2	Nar		ΓPΗ					2000		AZ		(N
Matrix     Sample Temperature:     3.8 °C       Matrix     Sample Request ID     Container     Presentative       Lippe and #     Type     Type     HEAL No.       S.::     RL-1-N -1LS     6 Vos 1     Nove       S.::     RL-1-N -1LS     6 Vos 4     Netalist       S.::     RL-1-N -1LS     6 Vos 4     Netalist       Reconstruct     Type     H112311     RTEX+MTBE       Reconstruct     Reconstruction     Reconstruction       Reconstruct     0.03     -003     Reconstruction       Reconstruct     Nove     -003     Reconstruction       Reconstruct     Nove     -003     Reconstruction       Reconstruct     Nove     -003     Reconstruction       Reconstruct     Reconstruction     Reconstruction     Reconstruction       Reconstruct     Reconstruction     Reconstruction     Reconstruction       Reconstruct     Reconstruction     Reconstruction     Reconstruction       Reconstruction     Reconstruction     Reconstruction     Reconstruction       Reconstruction     Reconstruction     Reconstruction     Reconstruction       Reconstruction     Reconstruction     Reconstruction     Reconstruction       Reconstruction     Reconstruction     Recons		<b>X</b> Yes	No	L +			S		19	(AC	<u>e</u>		oL
Matrix     Sample Request ID     Container     Preservative Type and #     HEAL No.       Anine     Type and #     Type and #     Type and #       Suit     Pu-1-N-1;     Gloss 1     Novef     BIEX + MT       Pu-1-N-3     Container     Preservative     BIEX + MT       Pu-1-S-5     Container     Preservative     BIEX + MT       Pu-1-S-6     Pu-1-S     Container     Preservative       Pu-1-S-7     Container     Preservative     BIEX + MT       Pu-1-S-7     Container     Preservative     BIEX + MT       Pu-1-S-1     Pu-1     Container     Preservative       Pu-1-S-1     Pu-1     Container     Preservative       Pu-1<-N-3	pe)	С	3°C	BE			siais	-			<u>N</u>		Y)
Suit RL-1-N-1:5 Gluss 1 Nioue -001 Nove -002 RL-3-C-1:5 -003 Nove -003 Nove -003 RL-3-C-1:5 -003 Nove -004 N Relitiquent theophy005 N Relitiquent from -005 N Reli	Matrix	<u> </u>	HEAL No.	TM + XJT8			ы 8 АЯЭЯ				50000		Air Bubbles
7     PL-1-N-3     -002     1       7     PL-3-C-1.5     -003     1       7     PL-3-C-3     -004     X       7     PL-3-C-3     -004     X       7     PL-3-C-3     -005     X       7     PL-3-C-3     -004     X       8     PL-3-C-3     -004     X       8     PL-3-C-3     PL-3-C-3 <t< td=""><td>1- N-1-74</td><td>4</td><td>- 001</td><td>)</td><td></td><td></td><td></td><td>Х</td><td></td><td></td><td></td><td></td><td></td></t<>	1- N-1-74	4	- 001	)				Х					
PL-3-C-15 PL-3-C-3 ASPING HNUDAN C ASPING HNUD	- N-1-70 /		-002					X					
PL-3-C-3 Reprint HUDPN - 004 X Y	1 1-3-6-		-003				)	$\overline{\checkmark}$					
Reprint     Hubban     -005       Market Hubban     Market Hubban     Market Hubban       Relinquished by:     Bate Time       Relinquished by:     Date Time       Relinquished by:     Date Time	( PL-3-C-		100-					X					
Kellinguyshed by:     Mathematical       Relinquished by:     Date	) ASPITAL		200-										
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

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

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

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

Sincerely,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

**Analytical Report** 

Lab Order: 1409D42

Hall Environ	mental Analys	is Laborate	ory, Inc.		Date Reported: 10/1/2014				
	R.T. Hicks Consultants North Hackberry Yates	,			<b>Lab Order:</b> 1409I	042			
Lab ID:	1409D42-001			Collection D	Date: 9/25/2014 10:32:00 A	AM			
Client Sample ID:	West Stockpile			Ma	trix: SOIL				
Analyses		Result	RL Qua	l Units	DF Date Analyzed	Batch ID			
EPA METHOD 300	0.0: ANIONS				Ana	alyst: <b>LGP</b>			
Chloride		880	30	mg/Kg	20 9/29/2014 6:31:22	PM 15595			
Lab ID:	1409D42-002			Collection D	Date: 9/25/2014 10:12:00 A	AM			
Client Sample ID:	East Stockpile			Ma	trix: SOIL				
Analyses		Result	RL Qua	l Units	DF Date Analyzed	Batch ID			
EPA METHOD 300	0.0: ANIONS				Ana	alyst: <b>LGP</b>			
Chloride		410	30	mg/Kg	20 9/29/2014 6:43:46	PM 15595			
Lab ID:	1409D42-003			Collection D	ate: 9/25/2014 9:08:00 A	М			
Client Sample ID:	S-1			Ma	trix: SOIL				
Analyses		Result	RL Qua	l Units	DF Date Analyzed	Batch ID			
EPA METHOD 300	0.0: ANIONS				Ana	alyst: <b>LGP</b>			
Chloride		260	30	mg/Kg	20 9/29/2014 6:56:10	PM 15595			
Lab ID:	1409D42-004			Collection D	ate: 9/25/2014 9:10:00 A	М			
Client Sample ID:	S-2			Ma	trix: SOIL				
Analyses		Result	RL Qua	l Units	DF Date Analyzed	Batch ID			
EPA METHOD 300	0.0: ANIONS				Ana	alyst: <b>LGP</b>			
Chloride		ND	30	mg/Kg	20 9/29/2014 7:08:35	PM 15595			
Lab ID:	1409D42-005			Collection D	ate: 9/25/2014 9:12:00 A	М			
Client Sample ID:	S-4			Ma	trix: SOIL				
Analyses		Result	RL Qua	l Units	DF Date Analyzed	Batch ID			
EPA METHOD 300	0.0: ANIONS				Ana	alyst: <b>LGP</b>			
Chloride		ND	30	mg/Kg	20 9/29/2014 7:45:48	PM 15595			

Hall Environmental Analysis Laboratory Inc

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

ND

Not Detected at the Reporting Limit

Analyte detected in the associated Method Blank В Holding times for preparation or analysis exceeded Н

Value exceeds Maximum Contaminant Level. Е Value above quantitation range

J Analyte detected below quantitation limits

RSD is greater than RSDlimit 0

Qualifiers:

\*

- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- Р Sample pH greater than 2.
- RL Reporting Detection Limit
- Page 1 of 3

Analy	vtical	Repo	rt
Allary	ucai	nupu	11

Lab Order: 1409D42

Hall Envi	ronmental Analys	sis Laborat	ory, Inc.		Date Reported: 10/1/2014				
CLIENT: Project:	R.T. Hicks Consultant North Hackberry Yate	,			Lab Order:	14090	042		
Lab ID:	1409D42-006			Collection E	Date: 9/25/2014 9:	13:00 Al	М		
Client Sample	e ID: S-3			Ma	trix: SOIL				
Analyses		Result	RL Qu	al Units	DF Date Ana	alyzed	Batch ID		
EPA METHO	D 300.0: ANIONS					Ana	lyst: LGP		
Chloride		ND	30	mg/Kg	20 9/29/2014	4 7:58:12	PM 15595		

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

- \* Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- RSD is greater than RSDlimit 0
- R RPD outside accepted recovery limits
- S Spike Recovery 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
- Sample pH greater than 2.
- Р
- RL Reporting Detection Limit
- Page 2 of 3

WO#:	1409D42
	01-Oct-14

Client: Project:		Hicks Consulta h Hackberry Ya									
Sample ID	MB-15595	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch	ID: 15	595	RunNo: <b>21544</b>						
Prep Date:	9/29/2014	Analysis D	ate: 9/	29/2014	S	SeqNo: 6	30734	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID	LCS-15595	SampT	ype: LC	s	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 15	595	F	RunNo: 2	1544				
Prep Date:	9/29/2014	Analysis D	ate: 9/	29/2014	S	SeqNo: 6	30735	Units: mg/K	g		
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			

- \* 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

	ll Environmental Analysis Labo 4901 Hawk Albuquerque, NM L: 505-345-3975 FAX: 505-34 Website: www.hallenvironment	ins NE 87105 Samp 5-4107	ole Log-In Check List
Client Name: RT HICKS Work	Order Number: 1409D42		RcptNo: 1
Received by/date: ATF 0912	e lut		
	14 10:48:00 AM	Junity Hougo	
Completed By: Lindsay Mangin 9/26/20	14 12:23:02 PM	Junky	
Reviewed By: MG gc	1/26/14	U .	
Chain of Custody	10-21		
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?	<u>Client</u>		
Log In			
4. Was an attempt made to cool the samples?	Yes 🗹	No 🗆	
5. Were all samples received at a temperature of $>0^\circ$ (		No 🗹	
6. Sample(s) in proper container(s)?	Approved Yes 🗹	<u>d by client.</u> No 🗔	
7. Sufficient sample volume for indicated test(s)?	Yes 🗹	No 🗔	
8. Are samples (except VOA and ONG) properly preser	ved? 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 🗹	# of preserved
12.Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No 🗆	botties checked for pH: (<2 or >12 unless noted)
13 Are matrices correctly identified on Chain of Custody	?Yes 🗹	No 🗆	Adjusted?
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 🗌	Checked by:

## Special Handling (if applicable)

Person Notified:		Date:		
	and an and a	<b>p</b>	· · · ·	_
By Whom:	· · · · · · · · · · · · · · · · · · · ·	Via: eMail	Phone Fax In I	Person
Regarding:				

\_

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			

<b>ENVTRONMENTAL</b>	ANALYSIS LABORATORY	www.hallenvironmental.com	Albuquerque, NM 87109	Fax 505-345-4107	Analysis Request			52 F	200, <sub>2</sub> C 5 / 808 (A(	-^C (7) (7) (7) (7) (7) (7) (7) (7) (7) (7)	ACRA 8 Me Anions (F.C 8081 Pestid 82508 (VO 8250 (Semi 8270 (Semi 70,0 70,0 70,0 70,0 70,0 70,0 70,0 70,	X	X	×	×	X	X				
		Www.h	4901 Hawkins NE	Tel. 505-345-3975		(ʎju	0 SB(	วษด อ) ⊦	IqT + ] \ OΣ (Γ.8Γ (Γ.40	09 2 09 7 (GI	BTEX + MT BTEX + MT B7EN 8015B TPH (Metho FDB (Metho FDB (831									Remarks:	
Time:	K Rush 0/30		HACKBERICY MED 103		SALL	ger:	K L		Kyes 🗆 No	serature: 🖒 , 🚶	Preservative Type	- ( -00		, Z	J.W.	- See -	-60%			$\int_{\mathcal{U}} \int_{\mathcal{U}} \frac{Date}{ \mathcal{U} /\gamma} \int_{0}^{1} \langle \gamma_{3} \rangle$	Date Time
Turn-Around Time:	Standard	18	1222N	Project #:		Project Manage			Sampler: On Ice:	Tem	Container Type and #	2 Glass	Zaber	1660	16460	166.01	1668			Received by:	Received by:
Chain-of-Custody Record	: Hicks Consultants		Mailing Address:		e# 238-9515	-ax#. R@ rthickscansult. cour		Level 4 (Full Validation)	on 🗆 Other	EDD (Type)	E Time Matrix Sample Request ID	IN32 SUL WEST SPOKALE	1012 SAST A STOCK!	90K 201 S-1	-	55	Se ( 5-3			Time: Relindurshed by	
-	Client:		Mailin		Phone #:	email	QA/QC	□ Sta	Accreditati		Date	7/25	9/2	$\sim$	$ \uparrow $	$\vdash$	$\vdash$			Date:	Date:



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

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

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

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

Sincerely,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analys		Lab Order <b>1409D4</b> Date Reported: <b>10</b> /	-		
CLIENT: R.T. Hicks Consultants, LTD	)		Client Sampl	e ID: PL-1 S	
<b>Project:</b> North Hackberry Yates 105			Collection 1	Date: 9/25/2014 9:31:00 A	М
Lab ID: 1409D40-001	Matrix: S	OIL	<b>Received</b>	Date: 9/26/2014 10:48:00	AM
Analyses	Result	RL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Ana	alyst: LGP
Chloride	ND	30	mg/Kg	20 9/29/2014 3:12:49	PM 15595

report and sample login checklist for flagged OC data and preservation information. Refer to the OC Si

Refer to the Q	e Summary	/ report and	sample login	checklist for	Thagged C	2C data and	preservation	informatio

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	Е	Value above quantitation range

- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 1 of 16
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analys	sis Laborat			Lab Order <b>1409D40</b> Date Reported: <b>10/1/2</b>	014	
CLIENT: R.T. Hicks Consultants, LTD	)		Client Samp	le ID: PL	-1 Center	
<b>Project:</b> North Hackberry Yates 105			<b>Collection</b>	<b>Date:</b> 9/2	5/2014 9:29:00 AM	
Lab ID: 1409D40-002	Matrix: S	SOIL	<b>Received</b>	<b>Date:</b> 9/2	6/2014 10:48:00 AM	[
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGP
Chloride	ND	30	mg/Kg	20	9/29/2014 3:50:03 PM	15595

Refer to the	QC Summar.	y report and	sample logi	i checklist foi	naggeu QC	, data and preser	varion mormat

- \* Value exceeds Maximum Contaminant Level.
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - O RSD is greater than RSDlimit

Qualifiers:

- 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 Page 2 of 16
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analys		Lab Order <b>1409D40</b> Date Reported: <b>10/1/201</b>	4		
CLIENT: R.T. Hicks Consultants, LTD			Client Sampl	e ID: PL-1 North	
<b>Project:</b> North Hackberry Yates 105			Collection 1	Date: 9/25/2014 9:31:00 AM	
Lab ID: 1409D40-003	Matrix: S	SOIL	<b>Received</b>	Date: 9/26/2014 10:48:00 AM	
Analyses	Result	RL Qu	al 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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
  - ND Not Detected at the Reporting Limit Page 3 of 16

**Analytical Report** 

- P Sample pH greater than 2.
- RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Analyte detected below quantitation limits

E Value above quantitation range

RSD is greater than RSDlimit

J

0

R

RL Reporting Detection Limit

Hall Environmental Analysi	Lab Order <b>1409D40</b> Date Reported: <b>10/1/2014</b>						
CLIENT: R.T. Hicks Consultants, LTD			Client Sampl	e ID: PL-2 North			
<b>Project:</b> North Hackberry Yates 105			Collection 1	Date: 9/25/2014 9:33:00 AM			
<b>Lab ID:</b> 1409D40-004	Matrix: S	OIL	Received 1	Date: 9/26/2014 10:48:00 AM			
Analyses	Result	RL Qua	al Units	DF Date Analyzed B	atch		
EPA METHOD 300.0: ANIONS				Analyst: L	.GP		
Chloride	58	30	mg/Kg	20 9/29/2014 4:14:52 PM 1	5595		

		•	5 1	1 8			
Qualifier	s: *	Value exc	eeds Maximum Contai	minant Level.	В	Analyte detected in the associa	ted Method

- \* Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank

- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 4 of 16
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

**Analytical Report** Lab Order 1409D40

Date Reported: 10/1/2014

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD

**Project:** North Hackberry Yates 105

Client Sample ID: PL-2 Center Collection Date: 9/25/2014 9:35:00 AM **Deceived Dete:** 0/26/2014 10:48:00 AM

Lab ID: 1409D40-005	Matrix:	SOIL	Received I	Received Date: 9/26/2014 10:48:00 AM					
Analyses	Result	RL Qu	al 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 RAN	IGE				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.
	Е	Value above quantitation range
	J	Analyte detected below quantitation limits
	0	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 5 of 16
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analys	is Laborat	Lab Order <b>1409D40</b> Date Reported: <b>10/1/2014</b>							
CLIENT: R.T. Hicks Consultants, LTD			Client Sampl	e ID: PL-2 South					
<b>Project:</b> North Hackberry Yates 105		Collection Date: 9/25/2014 9:36:00 AM							
Lab ID: 1409D40-006	Matrix: S	OIL	Received Date: 9/26/2014 10:48:00 AM						
Analyses	Result	RL Qua	al Units	DF Date Analyzed	Batch				
EPA METHOD 300.0: ANIONS				Analy	rst: LGP				
Chloride	ND	30	mg/Kg	20 9/29/2014 4:39:41 PM	A 15595				

		-	• •				-	
<b>Oualifiers:</b>	*	Value exco	eeds Maximum C	ontaminant Level.	В	Analyte d	etected in the assoc	ciated Meth

- Value exceeds Maximum Contaminant Level. Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank

**Analytical Report** 

Holding times for preparation or analysis exceeded Н

Page 6 of 16

- ND Not Detected at the Reporting Limit
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysi	s Laborat	Lab Order <b>1409D40</b> Date Reported: <b>10/1/2014</b>						
CLIENT: R.T. Hicks Consultants, LTD			Client Sampl	e ID: PL-3 North				
<b>Project:</b> North Hackberry Yates 105	Collection Date: 9/25/2014 9:46:00 AM							
Lab ID: 1409D40-007	Matrix: S	OIL	Received Date: 9/26/2014 10:48:00 AM					
Analyses	Result	RL Qu	al Units	DF Date Analyzed Ba	atch			
EPA METHOD 300.0: ANIONS				Analyst: Lo	GP			
Chloride	370	30	mg/Kg	20 9/29/2014 5:16:54 PM 15	5595			

Refer to the	QC Summa	y report and	i sample logn	enceknist for	naggeu QC	uata and preses	varion mormat

- \* Value exceeds Maximum Contaminant Level.
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - O RSD is greater than RSDlimit

Qualifiers:

- 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 Page 7 of 16
- P Sample pH greater than 2.
- RL Reporting Detection Limit

**Analytical Report** Lab Order 1409D40

Date Reported: 10/1/2014

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD

**Project:** North Hackberry Yates 105

Client Sample ID: PL-3 Center Collection Date: 9/25/2014 9:48:00 AM **Deceived Dete:** 0/26/2014 10:48:00 AM

Lab ID: 1409D40-008	Matrix:	SOIL	Received I	Received Date: 9/26/2014 10:48:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch			
EPA METHOD 8015D: DIESEL RANGE C	RGANICS				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 RANG	iΕ				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.
	Е	Value above quantitation range
	J	Analyte detected below quantitation limits
	0	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits
	J O R	Analyte detected below quantitation limits RSD is greater than RSDlimit RPD outside accepted recovery limits

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
  - Not Detected at the Reporting Limit Page 8 of 16
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

ND

Hall Environmental Analysi	s Laborat	Lab Order <b>1409D40</b> Date Reported: <b>10/1/2014</b>					
CLIENT: R.T. Hicks Consultants, LTD			Client Sampl	e ID: PL-3 South	1		
<b>Project:</b> North Hackberry Yates 105	Collection Date: 9/25/2014 9:50:00 AM						
Lab ID: 1409D40-009	Matrix: S	OIL	Received Date: 9/26/2014 10:48:00 AM				
Analyses	Result	RL Qua	al Units	DF Date A	nalyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	LGP	
Chloride	ND	30	mg/Kg	20 9/29/20	14 5:41:43 PM	15595	

		-		• 1			•	U	00		-			
Qualifiers:	*	Value exc	ceeds N	Maxim	um Co	ntamin	ant Le	evel.	В	An	alyte d	etected in the	associate	ed Metho

- \* Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank

- Holding times for preparation or analysis exceeded Η
- ND Not Detected at the Reporting Limit Page 9 of 16
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysi	is Laborat	Lab Order <b>1409D40</b> Date Reported: <b>10/1/2014</b>							
CLIENT: R.T. Hicks Consultants, LTD			Client Sampl	e ID: PL-4 North					
<b>Project:</b> North Hackberry Yates 105		Collection Date: 9/25/2014 9:54:00 AM							
Lab ID: 1409D40-010	Matrix: S	OIL	Received Date: 9/26/2014 10:48:00 AM						
Analyses	Result	RL Qua	al Units	DF Date Analyzed Ba	tch				
EPA METHOD 300.0: ANIONS				Analyst: LG	iP				
Chloride	470	30	mg/Kg	20 9/29/2014 5:54:08 PM 15	595				

iterer to the	QC Dummu	iry report un	a sumple login	checkinst for	nuggeu qe u	ata ana preserv	ation mornia

nant Level.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit

**Qualifiers:** 

- 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 Page 10 of 16
- P Sample pH greater than 2.
- RL Reporting Detection Limit

**Analytical Report** Lab Order 1409D40

Date Reported: 10/1/2014

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD

**Project:** North Hackberry Yates 105

Client Sample ID: PL-4 Center Collection Date: 9/25/2014 9:57:00 AM Dessived Deter 0/26/2014 10:49:00 AM

Lab ID: 1409D40-011	Matrix:	<b>Received Date:</b> 9/26/2014 10:48:00 AM				
Analyses	Result	RL Qu	al 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 RANG	GE				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.
	Е	Value above quantitation range
	J	Analyte detected below quantitation limits
	0	RSD is greater than RSDlimit

- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 11 of 16
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysi	Lab Order <b>1409D40</b> Date Reported: <b>10/1/2014</b>					
CLIENT: R.T. Hicks Consultants, LTD			Client Sampl	e ID: PL-4 South		
<b>Project:</b> North Hackberry Yates 105	Collection Date: 9/25/2014 10:01:00 AM					
Lab ID: 1409D40-012	Matrix: S	OIL	Received l	Date: 9/26/2014 10:48:00 AM		
Analyses	Result	RL Qu	al 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 checknist for hagged QC data and preserv	
--	--

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	Е	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 Page 12 of 16

- P Sample pH greater than 2.
- RL Reporting Detection Limit

WO#:	1409D40
	01-Oct-14

Client: Project:		Hicks Consulta h Hackberry Ya	,								
Sample ID	MB-15595	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	300.0: Anion	S		
Client ID:	PBS	Batch	n ID: 15	595	F	RunNo: 2	1544				
Prep Date:	9/29/2014	Analysis D	ate: 9/	29/2014	5	SeqNo: 6	30734	Units: <b>mg/K</b>	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID	LCS-15595	SampT	ype: LC	s	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	n ID: 15	595	F	RunNo: <b>2</b> '	1544				
Prep Date:	9/29/2014	Analysis D	ate: 9/	29/2014	S	SeqNo: 6	30735	Units: mg/K	g		
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

1 450 15 01 10

WO#:	1409D40
	01.0.11

	cks Consult Iackberry Y	,								
Sample ID MB-15534	•	Type: ME		TestCode: EPA Method 8015D: Diesel Range Organics						
Client ID: PBS	Batch	h ID: 15	534	R	RunNo: 2	1518				
Prep Date: 9/26/2014	Analysis D	Date: 9/	29/2014	S	eqNo: 6	30645	Units: mg/k	(g		
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	h ID: 15	534	R	RunNo: <b>2</b>	1518				
Prep Date: 9/26/2014	Analysis D	Date: <b>9/</b>	29/2014	S	SeqNo: 6	30646	Units: mg/k	íg		
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			

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

WO#:	1409D40

Client: Project:		ks Consultan ckberry Yate										
Sample ID	MB-15551	SampTyp	e: Me	BLK	Test	tCode: El	PA Method	8015D: Gaso	oline Rang	е		
Client ID:	PBS	Batch II	D: <b>15</b>	551	R	RunNo: 2	1502					
Prep Date:	9/26/2014	Analysis Dat	e: <b>9/</b>	28/2014	S	eqNo: 62	28928	Units: <b>mg/k</b>	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
-	e 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 Dat	e: 9/	/28/2014	S	SeqNo: 62	28929	Units: mg/h	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
-	e 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	SampTyp	e: ME	BLK	Test	Code: El	PA Method	8015D: Gaso	oline Rang	е		
Client ID:	PBS	Batch II	): <b>R2</b>	1502	R	RunNo: <b>2</b> 1	1502					
Prep Date:		Analysis Dat	e: 9/	/28/2014	S	SeqNo: 62	28939	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	SampTyp	e: LC	s	Test	Code: El	PA Method	8015D: Gaso	oline Rang	е		
Client ID:	LCSS	Batch II	D: R2	1502	R	RunNo: <b>2</b> ′	1502					
Prep Date:		Analysis Dat	e: 9/	28/2014	S	SeqNo: 62	28940	Units: %RE	C			
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	SampTyp	e: ME	BLK	Test	Code: El	PA Method	8015D: Gaso	oline Rang	е		
Client ID:	PBS	Batch II	D: R2	21524	R	RunNo: <b>2</b> '	1524		-			
Prep Date:		Analysis Dat	e: 9/	/29/2014	S	SeqNo: 62	29693	Units: %RE	c			
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	SampTyp	e: LC	s	Test	Code: El	PA Method	8015D: Gaso	oline Rang	e		
Client ID:		Batch II				RunNo: 2						
Prep Date:		Analysis Dat				eqNo: 62		Units: %RE	c			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
		960	. ~-	1000	2	96.1	80	120	, D		~~~	

#### **Qualifiers:**

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

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1409D40

01-Oct-14

Client: R.T. H	icks Consult	ants, LT	D							
Project: North	Hackberry Y	ates 105	5							
Sample ID MB-15551	Samp	Type: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: PBS	Batc	h ID: 15	551	R	unNo: 2	1502				
Prep Date: 9/26/2014	Analysis [	Date: 9/	28/2014	S	eqNo: 6	28956	Units: mg/k	٤g		
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	Samp	Type: LC	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batc	h ID: 15	551	R	unNo: 2	1502				
Prep Date: 9/26/2014	Analysis [	Date: <b>9/</b>	28/2014	S	eqNo: 6	28957	Units: mg/K	٢g		
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			
Ethylbenzene Xylenes, Total		0.050 0.10	1.000 3.000	0 0	100 99.3	80 80	120 120			

#### **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

-

	4901 Hawkins N Albuquerque, NM 8710 345-3975 FAX: 505-345-410 :: www.hallenvironmental.co	ッ Sam	ple Log-In C	heck List
Client Name: RT HICKS Work Order	Number: 1409D40	-	RcptNo:	1
Received by/date: AFE 09 261	14			
Logged By: Lindsay Mangin 9/26/2014 10:4	48:00 AM	Annlig Alberge		
Completed By: Lindsay Mangin 9/26/2014 12:*	14:19 PM	- +		
Reviewed By:	5 ILIN "			
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?	<u>Client</u>			
Log In				
4. Was an attempt made to cool the samples?	Yes 🗹	No 🗌	NA 🗌	
5. Were all samples received at a temperature of $>0^{\circ}$ C to 6.0	°C Yes 🗌 <u>Approved by c</u>	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 🗹 🛛	# _f	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No 🗌	# of preserved bottles checked for pH:	r >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes 🗹	No 🗌	Adjusted?	
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 🗌	Checked by:	
<u>Special Handling (if applicable)</u>				
16. Was client notified of all discrepancies with this order?	Yes	No 🗆		
Person Notified:	Date:			]
By Whom:	P	one 🦳 Fax	In Person	
Regarding:				
Client Instructions:			<del></del>	

## 17. Additional remarks:

## 18. Cooler Information

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

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HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com kins NE - Albuquerque, NM 87109 45-3975 Fax 505-345-4107 Analysis Request	8081 Pesticides / 8082 PCB's 8260B (VOA) 8270 (Semi-VOA) 6//0//6/ 6//0//6/		×	~		×	×	X	××	×	×	×		
<ul> <li>HALL ENVIRON</li> <li>HALL ENVIRON</li> <li>ANALYSIS LABO</li> <li>MMLYSIS LABO</li> <li>MMLYSIS LABO</li> <li>ANALYSIS LABO</li> </ul>	BTEX + MTBE + TMB's (8021) BTEX + MTBE + TMB's (8021) TPH (Method 504.1) EDB (Method 504.1) RCRA 8 Metals RCRA 8 Metals RCRA 8 Metals	/ 1 1 - -	1			XX XX			×				Remarks:	
I'm-Around Time: Standard Kush 9/30 roject Name: NektH Hydderev YATES 105 roject #: roject #:	Rat And		700-	1007	-004	-92-	9	+00-		00		210-	Time 1/14 /0148	Date Time
Turn-Around Time	Project Manager: Sampler: Sample Temperature: Container Preserv Type and # Typ	1 Colues	11	11	1(	¢	5				A		Received by:	Received by:
Record	Level 4 (Full Validation)	PL-1 CONST	PL-1 Crivled	_	R-2 NORTH	PL-2 Center	PL-2 Suth		PL 3 - Central	<del></del>	Ry conter	PL 4 -South		d by:
Client: Client	:: Bill Other (		929	931	933	935	936	946	840	954	957			ne: Reliñquished by
Client: Client: Mailing Address: Phone #:		-	9.	6	/	8	4	0		6	1		Date: Tim 1/26 10	