.

State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Ee NIM 87505



accordance with 19.15.29 NMAC.

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			Rele	ease Notific	ation	and Co	rrective A	ction	l.			
						OPERAT	TOR		🗌 Initia	al Report	\boxtimes	Final Report
Name of Co					1.1.1.2	Contact	_					
Yates Petrol	leum Corp	oration				Amber Griff					and the line of	
Address 104 S. 4 th St	reet					Felephone N 575-748-14						
Facility Nar			5	n na serie de la composition de la comp	the second se	Facility Typ						
Hilliard B F						Fank Batter						
									1			
Surface Ow Federal	ner			Mineral O Federal	wner				API No			
redefai				Federal				ere laine an Corre	30-005-	-20987		
				LOCA	TION	OF REI	LEASE					
Unit Letter	Section	Township	Range			South Line	Feet from the		Vest Line	County		
L	26	15S	30E	1980	ŝ	South	460		West	Chaves		
										and the second		
				Latitude 32.9	98501	_Longitude	103.90212					
				NAT	URE	OF REL	EASE					
Type of Rele	ase					Volume of	Release			Recovered		
Crude Oil Source of Re	1					6 B/O			0 B/O			
Heater Treate						1/4/2015; A	lour of Occurrenc	e	1/4/2015;	Hour of Dis	scovery	
Was Immedia	ate Notice (EXTERNOLOGICAL STREET		If YES, To						
			Yes	No 🛛 Not Re	quired	N/A						
By Whom?						Date and H	lour					
N/A Waa a Watan	aannaa Daar	-h - d9	antation menor la com	an ta a gifte ang i tanting ang i sa		N/A	1	1 117 /				
						N/A	olume Impacting t	the Wat	ercourse.			
IC WL	Ŧ	20094					1.500-5			and so the last time and the sec		
		pacted, Descr em and Reme										
				reater and busted,	causing	the release. V	Well was shut off	and rou	stabout cre	ws were cal	led.	
Describe Are	a Affected	and Cleanup	Action Tal	ken.*								
An approxim	ate area of	40' X 40' was	s affected.	The well was shu	t down,	production e	quipment was po	wer was	shed and co	ntaminated	soils w	vere removed.
BTEX. If ini	itial analyti	cal results for	TPH & B	proved facility. Ve TEX are under RR	AL's (s	ite ranking is	(0) a Final Report	t C-141	be taken a will be sul	nd analysis	ran for	TPH &
closure. If th	e analytica	I results are al	pove the R	RAL's a work plan	n will b	e submitted t	o the OCD. Dept	h to Gi	ound Wat	er: > 100' (approx	ximately
185', Section	n 26, T15S-	R30E, per T	rend Map), Wellhead Prote	ection A	rea: No, Dis	tance to Surface	Water	Body: >10	00', SITE	RANK	ING IS 0.
Yates Petrol	eum reque	information a	ased off a	ttached analytical e is true and compl	results	he hest of my	knowledge and a	ndersto	nd that num	mont to NN	10CD -	nulos on d
regulations a	Il operators	are required	to report a	nd/or file certain re	elease n	otifications a	nd perform correct	ctive act	tions for rel	eases which	n may e	ndanger
public health	or the envi	ronment. The	e acceptan	ce of a C-141 repo	rt by the	e NMOCD m	arked as "Final R	eport"	loes not rel	ieve the ope	erator o	f liability
should their	operations h	have failed to	adequately	y investigate and re	emediat	e contaminat	ion that pose a thr	eat to g	round wate	r, surface w	ater, hu	uman health
		ws and/or reg		ptance of a C-141 i	report d	oes not reliev	e the operator of	respons	ibility for c	ompliance	with an	y other
	\wedge						OIL CON	SERV	ATION	DIVISI	ON	
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Signature:	Ind	n On	AM			1015 S20529			Name	Kluyer		
Printed Nam	e: Amber C	riffin	00			Approved by	Environmental S	specialis	st:			
							06/10/2016	5		111		
Title: Enviro	nmental Re	presentative		3000		Approval Da	te:		Expiration	Date: "		
E-mail Addr	ess: agriffir	@yatespetrol	eum com			Conditions o	f Approval:					
E man ridu	eco, agririn	Sucoperio	-am.com			Conditions 0	r rippiovai.			Attache	d 🗌	
Date: June 8		-		e: 575-748-4111		1RP-3504						
* Attach Add	itional She	ets If Neces	sary									



JOHN A. YATES SR. CHAIRMAN EMERITUS JOHN A. YATES JR. CHAIRMAN OF THE BOARD DOUGLAS E. BROOKS PRESIDENT / CEO

105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210-2118 TELEPHONE (575) 748-1471

June 8, 2016

Mr. Jamie Keyes NMOCD District I 1625 N. French Dr. Hobbs, NM 88240

RE: Hilliard B Federal #1 30-005-20987 Section 26, T15S-R30E Chaves County, New Mexico

Mr. Keyes,

Yates Petroleum Corporation (Yates) would like to submit the attached Final C-141 and supporting documentation to you regarding the release that occurred at the above mentioned facility on January 4, 2015 (1RP-3504).

If you have any questions or concerns, I can be reached at (575) 748-4111 or by email at agriffin@yatespetroleum.com.

Thank You,

Amber Griffin Amber Griffin

Environmental Representative Yates Petroleum Corporation

Yates Petroleum Corporation

Hilliard B Federal #1

Section 26, T15S-R30E

Chaves County, New Mexico

June 8, 2016

I. Location

The well is located approximately 11 miles north of Loco Hills via Hagerman Cutoff Road and approximately 6 miles east of Hagerman Cutoff Road via lease roads.

II. Background

On January 4, 2015 Yates had a release of 6 barrels of crude oil, with 0 barrels of crude oil recovered. The area affected from this release was on the east side off of the production pad. An initial Form C-141 was submitted, via e-mail, to the NMOCD District I office on January 13, 2015 for this release.

On January 15, 2015 personnel returned to the release area and collected initial soil samples from the release area using a hand auger at depth of 6" and 1' below the surface level. Samples at each depth were a 5-point composite of the release area. The soil samples were sent to an approved NMOCD laboratory and tested for BTEX 8021B and TPH 8015M. Yates received the analytical results on January 20, 2015 (Report H500161 attached to this letter). The analytical results showed that BTEX and TPH were at levels above NMOCD RRAL's.

On January 20, 2015 personnel had a contractor spray the release area with a 3% Micro-Blaze and water mixture.

On February 16, 2016 personnel returned to the release area and collected further soil samples from the release area using a hand auger. Soil samples were collected from the surface, 1', 2' and 3' below the surface level. At this time the release area was split into three separate sections for sampling. The soil samples were sent to an approved NMOCD laboratory and tested for BTEX 8021B and TPH 8015M. Yates received the analytical results on February 25, 2015 (Report 1602849 attached to this letter). The analytical results showed that BTEX and TPH were at levels above NMOCD RRAL's only at 2' below the surface level in Section 2. All other sections and depths were below NMOCD RRAL's for this site.

On April 25, 2016 personnel had a contractor spray the release area with a 6% Micro-Blaze and water mixture.

On May 25, 2016 personnel returned to the release area and collected further soil samples from the release area using a hand auger. During this sampling event samples were collected from Section 1 at the depths of the surface and 1' below the surface level. Samples were also collected from Section 2 at the depths of the surface, 1', 2', and 3' below the surface level. The soil samples were sent to an approved NMOCD laboratory and tested for TPH 8015M. Yates received the analytical results on June 6, 2016 (Report 1605D62 attached to this letter). The analytical results showed that TPH are now at levels below NMOCD RRAL's for all samples collected.

III. Surface and Ground Water

Area surface geology is Cenozoic. The ChevronTexaco depth to ground water map shows the depth to groundwater to be approximately 185 feet making the site ranking for this site a

zero (0). Watercourses in the area are dry except for infrequent flows in response to major precipitation events.

The ranking for this site is zero (0) based on the following:

Depth to ground water>100'Wellhead Protection Area>1000'Distance to surface water body>1000'

IV. Soils

The area consists of soils that are sand.

V. Conclusion

Based off the analytical data which shows that Yates remediated the soils to TPH and BTEX levels below the NMOCD RRALs for a site ranking of zero (0), Yates requests closure. No further work will be conducted at this site.



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INITIAL SAMPLING Sample Area	Sample Area	Sample Date	Analytical Report	Sample Type	Depth	В	-	ш	×	втех	GRO	DRO	TOTAL
.9	Release Area	1/15/2015	H500161	Comp/Auger	.9	5.91	33.1	15.5	38.6	93.11	1,540	3,260	4,800
1.	Release Area	1/15/2015	H500161	Comp/Auger	1.	22.7	123	54.9	131	331.6	2,890	5,270	8,160
	Sample Area	Sample Date	Analytical Report	Sample Type	Depth	В	F	ш	×	BTEX	GRO	DRO	TOTAL
1 - Surface	Release Area	2/16/2016	1602849	Grab/Auger	Surface	Q	QN	QN	QN	QN	QN	2,200	2,200
1 - 1'	Release Area	2/16/2016	1602849	Grab/Auger	1.	Q	0.09	QN	2	2.09	500	2,000	2,500
1 - 2'	Release Area	2/16/2016	1602849	Grab/Auger	2'	Q	QN	ND	ND	ND	QN	45	45
1 - 3'	Release Area	2/16/2016	1602849	Grab/Auger	3'	QN	QN	ND	ND	ND	DN	ND	DN
2 - Surface	Release Area	2/16/2016	1602849	Grab/Auger	Surface	QN	QN	QN	QN	ND	DN	2,200	2,200
2-1'	Release Area	2/16/2016	1602849	Grab/Auger		Q	QN	ND	2.6	2.6	450	3,000	3,450
2 - 2'	Release Area	2/16/2016	1602849	Grab/Auger	2'	Q	g	QN	3.5	3.5	680	4,700	5,380
2-3'	Release Area	2/16/2016	1602849	Grab/Auger	3'	Q	Q	QN	4.8	4.8	450	4,000	4,450
3 - Surface	Release Area	2/16/2016	1602849	Grab/Auger	Surface	QN	QN	QN	Q	QN	QN	240	240
3-1'	Release Area	2/16/2016	1602849	Grab/Auger	1.	Q	ND	QN	ND	ND	QN	ND	ND
3 - 2'	Release Area	2/16/2016	1602849	Grab/Auger	2'	QN	QN	QN	QN	ND	QN	DN	ND
3-3'	Release Area	2/16/2016	1602849	Grab/Auger	3.	QN	QN	QN	QN	ND	QN	QN	QN
	Sample Area	Sample Date	Analytical Report	Sample Type	Depth	в	н	ш	×	BTEX	GRO	DRO	TOTAL
1 - Surface	Release Area	5/25/2016	1605D92	Grab/Auger	Surface	•		ī	•		ND	600	600
1 - 1'	Release Area	5/25/2016	1605D92	Grab/Auger	1.	3	•				ND	210	210
2 - Surface	Release Area	5/25/2016	1605D92	Grab/Auger	Surface			•	6		QN	820	820
2 - 1'	Release Area	5/25/2016	1605D92	Grab/Auger	1	•	•	•			14	1,500	1,514
2 - 2'	Release Area	5/25/2016	1605D92	Grab/Auger	2'				•	3	30	1,100	1,130
2-3'	Release Area	5/25/2016	1605D92	Grab/Auger	3'				•	•	QN	QN	QN

Site Ranking is zero (0). Depth to Ground Water >100' (approx. 185', per ChevronTexaco Trend Map). Released: 6 B/O; Recovered: 0 B/O. Release Date: 1/4/2015. 1RP-3504



January 20, 2015

AMBER CANNON YATES PETROLEUM CORPORATION 105 S 4th Street Artesia, NM 88210

RE: HILLARD B FEDERAL #1

Enclosed are the results of analyses for samples received by the laboratory on 01/16/15 12:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

YATES PETROLEUM CORPORATION AMBER CANNON 105 S 4th Street Artesia NM, 88210 Fax To: (505) 748-4635

Received:	01/16/2015	Sampling Date:	01/15/2015
Reported:	01/20/2015	Sampling Type:	Soil
Project Name:	HILLARD B FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	1RP-3504 (1/14/15 RELEASE)	Sample Received By:	Jodi Henson
Project Location:	CHAVES COUNTY		

Sample ID: COMP 6" (H500161-01)

BTEX 8021B	mg/	kg	Analyze	d By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	5.91	1.00	01/20/2015	ND	1.69	84.6	2.00	4.80		
Toluene*	33.1	1.00	01/20/2015	ND	1.71	85.5	2.00	4.41		
Ethylbenzene*	15.5	1.00	01/20/2015	ND	1.68	83.8	2.00	4.10		
Total Xylenes*	38.6	3.00	01/20/2015	ND	5.00	83.3	6.00	5.01		
Total BTEX	93.2	6.00	01/20/2015	ND						
Surrogate: 4-Bromofluorobenzene (PIL	103 9	61-154								
TPH 8015M	mg/	kg	Analyze	d By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GR0 C6-C10	1540	50.0	01/17/2015	ND	195	97.5	200	0.878		
DR0 >C10-C28	3260 USDD	50.0	01/17/2015	ND	207	103	200	3.71		
Surrogate: 1-Chlorooctane	164 9	6 47.2-15	7	anningarith a' ruisch nich ach ann a 1999.						
Surrogate: 1-Chlorooctadecane	153 9	52.1-17	б							

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*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celleg Di Keine -

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

YATES PETROLEUM CORPORATION AMBER CANNON 105 S 4th Street Artesia NM, 88210 Fax To: (505) 748-4635

Received:	01/16/2015	Sampling Date:	01/15/2015
Reported:	01/20/2015	Sampling Type:	Soil
Project Name:	HILLARD B FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	1RP-3504 (1/14/15 RELEASE)	Sample Received By:	Jodi Henson
Project Location:	CHAVES COUNTY		

Sample ID: COMP 1' (H500161-02)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	22.7	2.00	01/20/2015	ND	1.69	84.6	2.00	4.80	
Toluene*	123	2.00	01/20/2015	ND	1.71	85.5	2.00	4.41	
Ethylbenzene*	54.9	2.00	01/20/2015	ND	1.68	83.8	2.00	4.10	
Total Xylenes*	131	6.00	01/20/2015	ND	5.00	83.3	6.00	5.01	
Total BTEX	332	12.0	01/20/2015	ND					
Surrogate: 4-Bromofluorobenzene (PIL	106 %	61-154		n an					
TPH 8015M	mg/	kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GR0 C6-C10	2890	50.0	01/17/2015	ND	195	97.5	200	0.878	
DR0 >C10-C28	5270 8160	50.0	01/17/2015	ND	207	103	200	3.71	
Surrogate: 1-Chlorooctane	202 %	6 47.2-157	7						
Surrogate: 1-Chlorooctadecane	168 %	6 52.1-170	5						

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Calley Di Keene -

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

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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>

February 25, 2016

Amber Griffin Yates Petroleum Corporation 105 South Fourth Street Artesia, NM 88210 TEL: (575) 748-4111 FAX

RE: Hilliard B Federal 1

OrderNo.: 1602849

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 12 sample(s) on 2/19/2016 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,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report
Lab Order 1602849
Date Reported: 2/25/2016

Hall Environmental Analysis Laboratory, Inc.

 CLIENT:
 Yates Petroleum Corporation
 Client Sample ID: 1-Surface

 Project:
 Hilliard B Federal 1
 Collection Date: 2/16/2016 10:49:00 AM

 Lab ID:
 1602849-001
 Matrix: SOIL
 Received Date: 2/19/2016 9:00:00 AM

 Analyses
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 DF Date Analyzed
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Analyses	Result	PQL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6				Analyst	: KJH
Diesel Range Organics (DRO)	2200	96		mg/Kg	10	2/23/2016 5:02:28 PM	23859
Surr: DNOP	0	70-130	S	%Rec	10	2/23/2016 5:02:28 PM	23859
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/23/2016 7:24:36 PM	23866
Surr: BFB	91.3	66.2-112		%Rec	1	2/23/2016 7:24:36 PM	23866
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.048		mg/Kg	1	2/23/2016 7:24:36 PM	23866
Toluene	ND	0.048		mg/Kg	1	2/23/2016 7:24:36 PM	23866
Ethylbenzene	ND	0.048		mg/Kg	1	2/23/2016 7:24:36 PM	23866
Xylenes, Total	ND	0.095		mg/Kg	1	2/23/2016 7:24:36 PM	23866
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	2/23/2016 7:24:36 PM	23866

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 16
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 1 of 16
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 1602849 Date Reported: 2/25/2016

CLIENT: Yates Petroleum Corporation **Project:** Hilliard B Federal 1

1602849-002

Lab ID:

Client Sample ID: 1-1' Collection Date: 2/16/2016 10:58:00 AM Received Date: 2/19/2016 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S				Analyst	: к.ін
Diesel Range Organics (DRO)	2000	100		mg/Kg	10	2/24/2016 9:46:47 AM	23859
Surr: DNOP	0	70-130	S	%Rec	10	2/24/2016 9:46:47 AM	23859
EPA METHOD 8015D: GASOLINE RANG	E					Analyst	NSB
Gasoline Range Organics (GRO)	500	49		mg/Kg	10	2/24/2016 2:29:45 PM	23866
Surr: BFB	434	66.2-112	s	%Rec	10	2/24/2016 2:29:45 PM	23866
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.049		mg/Kg	1	2/23/2016 7:48:02 PM	23866
Toluene	0.090	0.049		mg/Kg	1	2/23/2016 7:48:02 PM	23866
Ethylbenzene	ND	0.049		mg/Kg	1	2/23/2016 7:48:02 PM	23866
Xylenes, Total	2.0	0.098		mg/Kg	1	2/23/2016 7:48:02 PM	23866
Surr: 4-Bromofluorobenzene	547	80-120	S	%Rec	1	2/23/2016 7:48:02 PM	23866

Matrix: SOIL

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 16
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 2 of 16
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

 CLIENT:
 Yates Petroleum Corporation
 Client Sample ID: 1-2'

 Project:
 Hilliard B Federal 1
 Collection Date: 2/16/2016 11:05:00 AM

 Lab ID:
 1602849-003
 Matrix: SOIL
 Received Date: 2/19/2016 9:00:00 AM

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EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S				Analyst	KJH
Diesel Range Organics (DRO)	45	10		mg/Kg	1	2/23/2016 6:27:06 PM	23859
Surr: DNOP	85.2	70-130		%Rec	1	2/23/2016 6:27:06 PM	23859
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NCR
Ganalina Banga Organica (OBO)							. NOD
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/23/2016 8:11:28 PM	23866
Surr: BFB	112	66.2-112	S	%Rec	1	2/23/2016 8:11:28 PM	23866
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.049		mg/Kg	1	2/23/2016 8:11:28 PM	23866
Toluene	ND	0.049					The second s
		0.049		mg/Kg	1	2/23/2016 8:11:28 PM	23866
Ethylbenzene	ND	0.049		mg/Kg	1	2/23/2016 8:11:28 PM	23866
Xylenes, Total	ND	0.099		mg/Kg	1	2/23/2016 8:11:28 PM	23866
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	2/23/2016 8:11:28 PM	23866

*	···		
	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	Е	Value above quantitation range
Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 16
ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 3 of 16
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified
		 D Sample Diluted Due to Matrix H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits 	DSample Diluted Due to MatrixEHHolding times for preparation or analysis exceededJNDNot Detected at the Reporting LimitPRRPD outside accepted recovery limitsRL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-3' **Project:** Hilliard B Federal 1 Collection Date: 2/16/2016 11:15:00 AM Lab ID: 1602849-004 Matrix: SOIL Received Date: 2/19/2016 9:00:00 AM Analyses Result PQL Qual Units **DF** Date Analyzed Batch EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: KJH Diesel Range Organics (DRO) ND 9.7 mg/Kg 2/23/2016 6:48:13 PM 23859 1

Surr: DNOP	86.7	70-130	%Rec	1	2/23/2016 6:48:13 PM	23859
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	2/23/2016 8:34:54 PM	23866
Surr: BFB	98.1	66.2-112	%Rec	1	2/23/2016 8:34:54 PM	23866
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.048	mg/Kg	1	2/23/2016 8:34:54 PM	23866
Toluene	ND	0.048	mg/Kg	1	2/23/2016 8:34:54 PM	23866
Ethylbenzene	ND	0.048	mg/Kg	1	2/23/2016 8:34:54 PM	23866
Xylenes, Total	ND	0.096	mg/Kg	1	2/23/2016 8:34:54 PM	23866
Surr: 4-Bromofluorobenzene	114	80-120	%Rec	1	2/23/2016 8:34:54 PM	23866

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	D	Analyte detected in the second d Math. 1D1 1
Quantitation	D		В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 16
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-Surface **Project:** Hilliard B Federal 1 Collection Date: 2/16/2016 10:50:00 AM Lab ID: 1602849-005 Matrix: SOIL Received Date: 2/19/2016 9:00:00 AM Analyses Result PQL Qual Units **DF** Date Analyzed Batch EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: KJH Diesel Range Organics (DRO) 2200 97 malle -----

biosci Range Organics (DRO)	2200	97		mg/Kg	10	2/23/2016 7:09:08 PM	23859
Surr: DNOP	0	70-130	S	%Rec	10	2/23/2016 7:09:08 PM	23859
EPA METHOD 8015D: GASOLINE RANGE	1					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/23/2016 8:58:28 PM	23866
Surr: BFB	98.5	66.2-112		%Rec	1	2/23/2016 8:58:28 PM	23866
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.049		mg/Kg	1	2/23/2016 8:58:28 PM	23866
Toluene	ND	0.049		mg/Kg	1	2/23/2016 8:58:28 PM	23866
Ethylbenzene	ND	0.049		mg/Kg	1	2/23/2016 8:58:28 PM	23866
Xylenes, Total	ND	0.098		mg/Kg	1	2/23/2016 8:58:28 PM	23866
Surr: 4-Bromofluorobenzene	117	80-120		%Rec	1	2/23/2016 8:58:28 PM	23866

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Η	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 5 of 16
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 5 of 16
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	w	Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1602849
Date Reported: 2/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-1' **Project:** Hilliard B Federal 1 Collection Date: 2/16/2016 11:27:00 AM Lab ID: 1602849-006 Matrix: SOIL Received Date: 2/19/2016 9:00:00 AM Analyses Result PQL Qual Units DF Date Analyzed Batch EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: KJH Diesel Range Organics (DRO) 3000 98 mg/Kg 10 2/23/2016 7:51:10 PM 23859 SUTT DNOP

Suff: DNOP	0	70-130	S	%Rec	10	2/23/2016 7:51:10 PM	23859
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO) Surr: BFB	450 379	48 66.2-112	s	mg/Kg %Rec	10 10	2/24/2016 2:53:20 PM 2/24/2016 2:53:20 PM	23866
EPA METHOD 8021B: VOLATILES	0.0	00.2 112	0	701 YEC	10	2/24/2016 2:53:20 PM Analyst:	23866 NSB
Benzene	ND	0.048		mg/Kg	1	2/23/2016 9:22:00 PM	23866
Toluene	ND	0.048		mg/Kg	1	2/23/2016 9:22:00 PM	23866
Ethylbenzene	ND	0.048		mg/Kg	1	2/23/2016 9:22:00 PM	23866
Xylenes, Total	2.6	0.096		mg/Kg	1	2/23/2016 9:22:00 PM	23866
Surr: 4-Bromofluorobenzene	482	80-120	S	%Rec	1	2/23/2016 9:22:00 PM	23866

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 6 of 16
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 6 of 16
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

 CLIENT:
 Yates Petroleum Corporation
 Client Sample ID: 2-2'

 Project:
 Hilliard B Federal 1
 Collection Date: 2/16/2016 11:32:00 AM

 Lab ID:
 1602849-007
 Matrix:
 SOIL
 Received Date: 2/19/2016 9:00:00 AM

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EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S				Analyst	: КЈН
Diesel Range Organics (DRO)	4700	100		mg/Kg	10	2/23/2016 8:33:01 PM	23859
Surr: DNOP	0	70-130	S	%Rec	10	2/23/2016 8:33:01 PM	23859
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	680	99		mg/Kg	20	2/24/2016 3:16:57 PM	23866
Surr: BFB	330	66.2-112	s	%Rec	20	2/24/2016 3:16:57 PM	23866
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.049		mg/Kg	1	2/23/2016 9:45:28 PM	23866
Toluene	ND	0.049		mg/Kg	1	2/23/2016 9:45:28 PM	23866
Ethylbenzene	ND	0.049		mg/Kg	1	2/23/2016 9:45:28 PM	23866
Xylenes, Total	3.5	0.099		mg/Kg	1	2/23/2016 9:45:28 PM	23866
Surr: 4-Bromofluorobenzene	704	80-120	S	%Rec	1	2/23/2016 9:45:28 PM	23866

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

*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Sample nH Not In Page 7 of 16
ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified
		 D Sample Diluted Due to Matrix H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits 	DSample Diluted Due to MatrixEHHolding times for preparation or analysis exceededJNDNot Detected at the Reporting LimitPRRPD outside accepted recovery limitsRL

Analy

Hall Environmental Analysis Laboratory, Inc.

 CLIENT:
 Yates Petroleum Corporation
 Client Sample ID: 2-3'

 Project:
 Hilliard B Federal 1
 Collection Date: 2/16/2016 11:37:00 AM

 Lab ID:
 1602849-008
 Matrix: SOIL
 Received Date: 2/19/2016 9:00:00 AM

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 PQL
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 DF Date Analyzed
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EPA METHOD 8015M/D: DIESEL RANGE C	RGANIC	s				Analyst:	КЛН
Diesel Range Organics (DRO)	4000	96		mg/Kg	10	2/23/2016 9:14:54 PM	23859
Surr: DNOP	0	70-130	S	%Rec	10	2/23/2016 9:14:54 PM	23859
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	450	48		mg/Kg	10	2/24/2016 3:40:33 PM	23866
Surr: BFB	371	66.2-112	S	%Rec	10	2/24/2016 3:40:33 PM	23866
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.048		mg/Kg	1	2/23/2016 10:09:01 PM	23866
Toluene	ND	0.048		mg/Kg	1	2/23/2016 10:09:01 PM	23866
Ethylbenzene	ND	0.048		mg/Kg	1	2/23/2016 10:09:01 PM	23866
Xylenes, Total	4.8	0.096		mg/Kg	1	2/23/2016 10:09:01 PM	23866
Surr: 4-Bromofluorobenzene	500	80-120	S	%Rec	1	2/23/2016 10:09:01 PM	23866

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 8 of 16
	ND Not Detected at the Reporting Limit		Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

 CLIENT:
 Yates Petroleum Corporation
 Client Sample ID: 3-Surface

 Project:
 Hilliard B Federal 1
 Collection Date: 2/16/2016 10:51:00 AM

 Lab ID:
 1602849-009
 Matrix: SOIL
 Received Date: 2/19/2016 9:00:00 AM

 Analyses
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 Batch

EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst: KJH
Diesel Range Organics (DRO)	240	9.8	mg/Kg	1	2/23/2016 9:56:52 PM 23859
Surr: DNOP	85.6	70-130	%Rec	1	2/23/2016 9:56:52 PM 23859
EPA METHOD 8015D: GASOLINE RANGI	=				
	-				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	2/23/2016 10:32:29 PM 23866
Surr: BFB	105	66.2-112	%Rec	1	2/23/2016 10:32:29 PM 23866
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.047			and the second
	ND	0.047	mg/Kg	1	2/23/2016 10:32:29 PM 23866
Toluene	ND	0.047	mg/Kg	1	2/23/2016 10:32:29 PM 23866
Ethylbenzene	ND	0.047	mg/Kg	1	2/23/2016 10:32:29 PM 23866
Xylenes, Total	ND	0.095	mg/Kg	1	
Surr: 4-Bromofluorobenzene					2/23/2016 10:32:29 PM 23866
Sun. 4-biomoliuorobenzene	99.0	80-120	%Rec	1	2/23/2016 10:32:29 PM 23866

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Applyto detected in the area into IM (1, 101, 1
	D			Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 9 of 16
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 9 of 16
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Project: Hilliard B Federal 1 Leb ID: 1602840 010				Date: 2/	16/2016 12:00:00 PM	
Lab ID: 1602849-010	Matrix:	SOIL	Received 1	Date: 2/	19/2016 9:00:00 AM	
Analyses	Result	PQL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S		1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	Analyst	: KJH
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	2/23/2016 10:38:47 PM	
Surr: DNOP	85.0	70-130	%Rec	1	2/23/2016 10:38:47 PM	23859
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	2/23/2016 10:55:52 PM	23866
Surr: BFB	97.5	66.2-112	%Rec	1	2/23/2016 10:55:52 PM	23866
EPA METHOD 8021B: VOLATILES					Analyst	: NSB

Sum BFB	97.5	66.2-112	%Rec	1	2/23/2016 10:55:52 PM	23866
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.047	mg/Kg	1	2/23/2016 10:55:52 PM	23866
Toluene	ND	0.047	mg/Kg	1	2/23/2016 10:55:52 PM	23866
Ethylbenzene	ND	0.047	mg/Kg	1	2/23/2016 10:55:52 PM	23866
Xylenes, Total	ND	0.095	mg/Kg	1	2/23/2016 10:55:52 PM	23866
Surr: 4-Bromofluorobenzene	112	80-120	%Rec	1	2/23/2016 10:55:52 PM	23866

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 10 of 16
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 10 of 16
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	w	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 3-2' **Project:** Hilliard B Federal 1 Collection Date: 2/16/2016 12:10:00 PM Lab ID: 1602849-011 Matrix: SOIL Received Date: 2/19/2016 9:00:00 AM Analyses Result PQL Qual Units **DF** Date Analyzed Batch EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: KJH Diesel Range Organics (DRO) ND 9.8 mg/Kg 2/23/2016 10:59:39 PM 23859 1 Surr: DNOP 94.1 70-130 %Rec 1 2/23/2016 10:59:39 PM 23859 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5.0 mg/Kg 2/24/2016 12:29:54 AM 23866 1 Surr: BFB 97.6 66.2-112 %Rec 2/24/2016 12:29:54 AM 23866 1

EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	2/24/2016 12:29:54 AM 23866
Toluene	ND	0.050	mg/Kg	1	2/24/2016 12:29:54 AM 23866
Ethylbenzene	ND	0.050	mg/Kg	1	2/24/2016 12:29:54 AM 23866
Xylenes, Total	ND	0.099	mg/Kg	1	2/24/2016 12:29:54 AM 23866
Surr: 4-Bromofluorobenzene	115	80-120	%Rec	1	2/24/2016 12:29:54 AM 23866

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 11 of 16
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 11 of 16
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 3-3' **Project:** Hilliard B Federal 1 Collection Date: 2/16/2016 12:20:00 PM Lab ID: 1602849-012 Matrix: SOIL Received Date: 2/19/2016 9:00:00 AM Analyses Result PQL Qual Units **DF** Date Analyzed Batch EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: KIH

					Analyst. n	NULL
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	2/23/2016 11:20:38 PM 2	23859
Surr: DNOP	96.8	70-130	%Rec	1	2/23/2016 11:20:38 PM 2	23859
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst: N	ISB
Gasoline Range Organics (GRO)	ND	1.0				100
tana managana ang ang ang ang ang ang ang ang	ND	4.9	mg/Kg	1	2/24/2016 12:53:19 AM 2	23866
Surr: BFB	94.4	66.2-112	%Rec	1	2/24/2016 12:53:19 AM 2	23866
EPA METHOD 8021B: VOLATILES					Analyst: N	ISB
Benzene	ND	0.040				
	ND	0.049	mg/Kg	1	2/24/2016 12:53:19 AM 2	3866
Toluene			mg/Kg mg/Kg	1		23866
	ND	0.049	mg/Kg	1 1		23866 23866
Ethylbenzene				1 1 1	2/24/2016 12:53:19 AM 2	
Ethylbenzene Xylenes, Total	ND	0.049	mg/Kg	1 1 1	2/24/2016 12:53:19 AM 2 2/24/2016 12:53:19 AM 2	23866
Ethylbenzene	ND ND	0.049 0.049	mg/Kg mg/Kg	1 1 1 1	2/24/2016 12:53:19 AM 2 2/24/2016 12:53:19 AM 2 2/24/2016 12:53:19 AM 2	23866 23866

and the second se				
Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 12 of 16
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 12 of 16
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

		5)	25-Feb-16
Client: Yat	es Petroleum Corporation		
	iard B Federal 1		
-			
Sample ID LCS-23882	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics	
Client ID: LCSS	Batch ID: 23882	RunNo: 32326	
Prep Date: 2/23/2016	Analysis Date: 2/23/2016	SeqNo: 988158 Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual
Surr: DNOP	5.3 5.000	106 70 130	Quui
Sample ID MB-23882	SampType: MBLK	TestCode: EDA Mothod 901EM/D: Discul Dame O	1
Client ID: PBS	Batch ID: 23882	TestCode: EPA Method 8015M/D: Diesel Range Organics RunNo: 32326	
Prep Date: 2/23/2016	Analysis Date: 2/23/2016		
Analyte Surr: DNOP	Result PQL SPK value 9.4 10.00	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual
	9.4 10.00	94.0 70 130	
Sample ID LCS-23859	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics	
Client ID: LCSS	Batch ID: 23859	RunNo: 32327	
Prep Date: 2/22/2016	Analysis Date: 2/23/2016	SeqNo: 988166 Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual
Diesel Range Organics (DRO)	43 10 50.00	0 86.5 65.8 136	Quai
Surr: DNOP	4.8 5.000	95.8 70 130	
Sample ID MB-23859	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics	
Client ID: PBS	Batch ID: 23859	RunNo: 32327	
Prep Date: 2/22/2016	Analysis Date: 2/23/2016	SeqNo: 988168 Units: mg/Kg	
Analyte			10.010 50
Diesel Range Organics (DRO)	ND 10	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual
Surr: DNOP	8.7 10.00	87.0 70 130	
Sample ID LCS-23901	SampType: LCS	T. (0.1	
Client ID: LCSS	Batch ID: 23901	TestCode: EPA Method 8015M/D: Diesel Range Organics	
Prep Date: 2/23/2016		RunNo: 32363	
	Analysis Date: 2/24/2016	SeqNo: 989602 Units: %Rec	
Analyte		SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual
Surr: DNOP	5.0 5.000	99.6 70 130	
Sample ID MB-23901	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics	
Client ID: PBS	Batch ID: 23901	RunNo: 32363	
Prep Date: 2/23/2016	Analysis Date: 2/24/2016	SeqNo: 989603 Units: %Rec	
Analyte	Result PQL SPK value		Qual
Surr: DNOP	9.7 10.00	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit 97.0 70 130	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits J Р
 - Sample pH Not In Range
- RL **Reporting Detection Limit**
- W Sample container temperature is out of limit as specified

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WO#: 1602849 25-Feb-16

QC SUMMARY REPORT

Hall Environmen	watal Analysis Laboratory, Inc.	O#: 1602849 25-Feb-16							
	Petroleum Corporation d B Federal 1								
Sample ID MB-23867	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 23867 RunNo: 32332								
Prep Date: 2/22/2016	Analysis Date: 2/23/2016 SeqNo: 988918 Units: %Rec								
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDL	imit Qual							
Surr: BFB	920 1000 91.8 66.2 112	duu duu							
Sample ID LCS-23867	LCS-23867 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 23867 RunNo: 32332								
Prep Date: 2/22/2016	Analysis Date: 2/23/2016 SeqNo: 988919 Units: %Rec								
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLi	mit Qual							
Surr: BFB	990 1000 99.2 66.2 112								
Sample ID MB-23866	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 23866 RunNo: 32332								
Prep Date: 2/22/2016	Analysis Date: 2/23/2016 SeqNo: 988952 Units: mg/Kg								
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLi	mit Qual							
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 950 1000 95.4 66.2 112								
Sample ID LCS-23866	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 23866 RunNo: 32332								
Prep Date: 2/22/2016	Analysis Date: 2/23/2016 SeqNo: 988963 Units: mg/Kg								
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLi	mit Qual							
Gasoline Range Organics (GRO) Surr: BFB	29 5.0 25.00 0 114 79.6 122 1100 1000 113 66.2 112								
	110 00.2 112	S							
Sample ID MB-23887	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 23887 RunNo: 32377								
Prep Date: 2/23/2016	Analysis Date: 2/24/2016 SeqNo: 989970 Units: %Rec								
Analyte Surr: BFB	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLin 940 1000 94.1 66.2 112	mit Qual							
	940 1000 94.1 66.2 112								
Sample ID LCS-23887	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 23887 RunNo: 32377								
Prep Date: 2/23/2016	Analysis Date: 2/24/2016 SeqNo: 989971 Units: %Rec								
Analyte Surr: BFB	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLin	mit Qual							
Guil, DED	1000 100 102 66.2 112								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Η
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Ε Value above quantitation range
- Analyte detected below quantitation limits J Р
 - Sample pH Not In Range
- RL **Reporting Detection Limit**
- W Sample container temperature is out of limit as specified

Page 14 of 16

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

					or <i>y</i> , me.						25-Feb-1
Client: Project:		etroleum Co B Federal 1	•	on							
Sample ID	MB-23867	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID:	PBS	Batch	ID: 23	867	F	unNo: 32	2332				
Prep Date:	2/22/2016	Analysis D	ate: 2/	23/2016		eqNo: 98		Units: %Red	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromo	ofluorobenzene	1.1		1.000		110	80	120			ddui
Sample ID	LCS-23867	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID:	LCSS	Batch	ID: 23	867	F	unNo: 32	2332				
Prep Date:	2/22/2016	Analysis D	ate: 2/	23/2016	5	eqNo: 98	89012	Units: %Red	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromo	ofluorobenzene	1.2		1.000		120	80	120			S
Sample ID	MB-23866	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID:	PBS	Batch	ID: 23	866	F	unNo: 32	2332				
Prep Date:	2/22/2016	Analysis D	ate: 2/	23/2016	5	eqNo: 98	89021	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	u folia 1. de la latera destada regimenta	ND	0.050								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total	•	ND	0.10								
Surr: 4-Brome	ofluorobenzene	1.1		1.000		113	80	120			
Sample ID	LCS-23866	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID:	LCSS	Batch	ID: 23	866	F	RunNo: 32	2332				
Prep Date:	2/22/2016	Analysis D	ate: 2/	23/2016	5	eqNo: 98	89022	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1	0.050	1.000	0	105	80	120	and a second		
Toluene		1.0	0.050	1.000	0	105	80	120			
Ethylbenzene		1.1	0.050	1.000	0	106	80	120			
Xylenes, Total		3.2	0.10	3.000	0	108	80	120			
Surr: 4-Brome	ofluorobenzene	1.1		1.000		115	80	120			
Sample ID	MB-23887	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID:	PBS	Batch	ID: 23	887	F	RunNo: 3	2377				
Prep Date:	2/23/2016	Analysis D	ate: 2/	24/2016	S	SeqNo: 9	90007	Units: %Ree	5		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	ofluorobenzene	1.1		1.000		111	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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WO#: 1602849

25-Feb-16

QC SUMMARY REPORT

Hall Environmenta	l Analysis	Laboratory, Inc.
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Client: Project:		etroleum Co B Federal 1		on							
Sample ID	LCS-23887	SampT	ype: LC	s	TestCode: EPA Method 8021B: Volatiles						
Client ID:	LCSS	Batch	ID: 23	887	RunNo: 32377						
Prep Date:	ate: 2/23/2016 Analysis Date: 2/24/2016				S	SeqNo: 990008 Units: %Rec					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	ofluorobenzene	1.2		1.000		124	80	120			S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 16 of 16

1602849 25-Feb-16

WO#:

ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-34	nmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 45-3975 FAX: 505-345-4107 www.hallenvironmental.com								
Client Name: Yates Petroleum Corpora Work Order N	lumber: 1602849	8	RcptNo: 1						
Received by/dates	f								
Logged By: Ashley Gallegos 2/19/2016 9:00:	00 AM 9	47							
Completed By: Ashley Gallegos 2/19/2016 3:28:	04 PM 🔊	to a							
Reviewed By: A 02/22/16		U							
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?	Courier								
<u>Log in</u>									
4. Was an attempt made to cool the samples?	Yes 🗹	No 🗆							
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 viais 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 >1	2 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) 16. Was client notified of all discrepancies with this order?	Yes 🗋	No 🗆	NA 🗹						
	Date Via:	ne 🗌 Eav	In Person						
Regarding:									
Client Instructions:	den Mild II. Synthesis and an in direct strategy and a second strategy and a second strategy and a second strat								
17. Additional remarks:									
18. <u>Cooler Information</u>									

Seal Date

Signed By

è

Cooler No	Temp °C	Condition	Seal Intact	Seal No	
1	4.1	Good	Yes		Î

Tum-Around Time:			Hilliard B Federal #1 4901 Hawkins NE - Albuquerque, NM 87109	Project #: Tel. 505-345-3975	1RP-3504 Analy	Project Manager:	Amber Griffin	PO # 205-2020	Amber Griffin A() A Pt (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	AOV (1) (1) (1) (1) (2) (1) (2) (1) (2) (2) (2) (2) (2) (2) (2) (2	Containe Type and	Surface 1 - 4oz. Ice - 00/ X X	1 - 402. Ice - 003 x x x	2 1- 402. Ice -0003 x x x	3' 1-402. Ice -004 x x x	1 - 4oz. Ice -	1 - 4oz. Ice -00(0 X X I	r 1-40z. Ice -007 x x 1	s 1 - 4oz. Ice -0.08 x x 1	Surface 1 - 4oz. Ice -000 X X 1	1 - 4oz lce 0 0 × × ×		1 - 402. Ice0(3, x x	$\int G_{A,A,A,A} = \int G_{A,A,A,A} = \int G_{A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,$	V Received by: Date Time
Chain-of-Custody Record		Project Name			575-513-8799 or 575-748-4111	agriffin@vatespetroleum.com Project Mana		Level 4 (Full Validation)		Canolex	Sample Request ID Type and #	1 - Surface 1 - 4oz.	1 - 1' 1 - 40Z.	1 - 2' 1- 4oz.	1 - 3' 1 - 4oz.	2 - Surface 1 - 4oz.	2 - 1' 1 - 4oz.	2 - 2' 1 - 4oz.		3 - Surface 1 - 4oz.	- 4oz.		3 - 3' 1 - 4oz.	Ruikin	
nain-of-Cu	Yates Petroleum Corporation		dress:	05 South 4th Street Artesia, NM 88210	575-513			q		une)	Time Matrix	10:49 Soil	10:58 Soil	11:05 Soil	11:15 Soil	10:50 Soil	11:27 Soil	11:32 Soil	11:37 Soil	10:51 Soil	12:00 Soil	12:10 Soil	12:20 Soil		Relinquist
ប៊	Xient:		Aailing Address:	05 South	hone #:	imail or Fax#:	JA/QC Package:	J Standard	Accreditation:	TEDD (Twee)	Date	2/16/2016	2/16/2016	2/16/2016	2/16/2016	2/16/2016	2/16/2016	2/16/2016	2/16/2016	2/16/2016	2/16/2016	2/16/2016	2/16/2016) S (

on the analytical report. SPIG .

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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>

June 06, 2016 Amber Griffin Yates Petroleum Corporation 105 South Fourth Street Artesia, NM 88210 TEL: (575) 748-4111 FAX

RE: Hilliard B Federal 1

OrderNo.: 1605D62

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/27/2016 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,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report
Lab Order 1605D62
Date Reported: 6/6/2016

6/1/2016 12:45:38 PM

25568

Hall Environmental Analysis Laboratory, Inc.

Surr: BFB

CLIENT: Yates Petroleum Corporation **Client Sample ID: 1-Surface** Project: Hilliard B Federal 1 Collection Date: 5/25/2016 7:20:00 AM Lab ID: 1605D62-001 Matrix: SOIL Received Date: 5/27/2016 9:50:00 AM Analyses Result PQL Qual Units **DF** Date Analyzed Batch EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: JME Diesel Range Organics (DRO) 600 97 mg/Kg 6/2/2016 7:26:09 PM 10 25601 Surr: DNOP 0 70-130 S %Rec 10 6/2/2016 7:26:09 PM 25601 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 6/1/2016 12:45:38 PM 25568

80-120

%Rec

1

116

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits n 1 60
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 1 of 8
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1605D62
Date Reported: 6/6/2016

6/1/2016 4:16:56 PM

25568

Hall Environmental Analysis Laboratory, Inc.

Surr: BFB

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-1' **Project:** Hilliard B Federal 1 Collection Date: 5/25/2016 7:39:00 AM Lab ID: 1605D62-002 Matrix: SOIL Received Date: 5/27/2016 9:50:00 AM Analyses Result PQL Qual Units **DF** Date Analyzed Batch EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: JME Diesel Range Organics (DRO) 210 100 mg/Kg 10 6/2/2016 8:10:03 PM 25601 Surr: DNOP 0 70-130 s %Rec 10 6/2/2016 8:10:03 PM 25601 EPA METHOD 8015D: GASOLINE RANGE Analyst: NSB Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 6/1/2016 4:16:56 PM 25568

80-120

%Rec

1

119

And a second sec					
Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blan	nk
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range	age 2 of 8
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as	specified

Analytical Report
Lab Order 1605D62
Date Reported: 6/6/2016

6/1/2016 4:40:21 PM

6/1/2016 4:40:21 PM

25568

25568

Hall Environmental Analysis Laboratory, Inc.

Gasoline Range Organics (GRO)

Surr: BFB

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-Surface **Project:** Hilliard B Federal 1 Collection Date: 5/25/2016 7:23:00 AM Lab ID: 1605D62-003 Matrix: SOIL Received Date: 5/27/2016 9:50:00 AM Analyses Result PQL Qual Units **DF** Date Analyzed Batch EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: JME Diesel Range Organics (DRO) 820 100 mg/Kg 10 6/2/2016 8:53:28 PM 25601 Surr: DNOP 0 70-130 S %Rec 10 6/2/2016 8:53:28 PM 25601 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB

4.9

80-120

mg/Kg

%Rec

1

1

ND

118

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Decer 2 = 6.9
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 3 of 8
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1605D62
Date Reported: 6/6/2016

6/1/2016 5:03:46 PM

6/1/2016 5:03:46 PM

25568

25568

1

1

Hall Environmental Analysis Laboratory, Inc.

Gasoline Range Organics (GRO)

Surr: BFB

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-1' **Project:** Hilliard B Federal 1 Collection Date: 5/25/2016 7:50:00 AM Lab ID: 1605D62-004 Matrix: SOIL Received Date: 5/27/2016 9:50:00 AM Analyses Result PQL Qual Units **DF** Date Analyzed Batch EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: JME Diesel Range Organics (DRO) 1500 96 mg/Kg 10 6/2/2016 9:36:48 PM 25601 Surr: DNOP 0 70-130 S %Rec 6/2/2016 9:36:48 PM 10 25601 EPA METHOD 8015D: GASOLINE RANGE Analyst: NSB

4.7

S

80-120

mg/Kg

%Rec

14

181

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 4 of 8
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis	c.	Lab Order 1605D62 Date Reported: 6/6/2016						
CLIENT: Yates Petroleum Corporation Project: Hilliard B Federal 1 Lab ID: 1605D62-005	Matrix: S	SOIL		Client Sample ID: 2-2' Collection Date: 5/25/2016 7:57:00 AM Received Date: 5/27/2016 9:50:00 AM				
Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	
EPA METHOD 8015M/D: DIESEL RANGI	E ORGANICS					Analyst	JME	
Diesel Range Organics (DRO)	1100	98		mg/Kg	10	6/2/2016 10:19:59 PM	25601	
Surr: DNOP	0	70-130	S	%Rec	10	6/2/2016 10:19:59 PM	25601	
EPA METHOD 8015D: GASOLINE RANG	E					Analyst	: NSB	
Gasoline Range Organics (GRO)	30	4.9		mg/Kg	1	6/1/2016 5:27:11 PM	25568	
Surr: BFB	231	80-120	S	%Rec	1	6/1/2016 5:27:11 PM	25568	

Analytical Report Lab Order 1605D62 Date Reported: 6/6/2016

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Η	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 5 of 8
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	w	Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1605D62
Date Reported: 6/6/2016

6/1/2016 5:50:41 PM

25568

25568

Hall Environmental Analysis Laboratory, Inc.

Surr: BFB

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-3' **Project:** Hilliard B Federal 1 Collection Date: 5/25/2016 8:05:00 AM Lab ID: 1605D62-006 Matrix: SOIL Received Date: 5/27/2016 9:50:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: JME Diesel Range Organics (DRO) ND 10 mg/Kg 1 6/2/2016 11:03:05 PM 25601 Surr: DNOP 96.9 70-130 %Rec 1 6/2/2016 11:03:05 PM 25601 EPA METHOD 8015D: GASOLINE RANGE Analyst: NSB Gasoline Range Organics (GRO) ND 6/1/2016 5:50:41 PM 4.6 mg/Kg 1

80-120

S

%Rec

1

121

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits n
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range Page 6 of 8
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

	ates Petroleum Corporation lliard B Federal 1									
Sample ID LCS-25600	LCS-25600 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: LCSS	Batch ID: 25600	No. 1. The Artest Automation of Contraction of Cont								
Prep Date: 6/1/2016	Analysis Date: 6/2/2016	SeqNo: 1	068193	Units: %Rec						
Analyte	Result PQL SPK valu	e SPK Ref Val %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: DNOP	3.8 5.00	0 75.0	70	130						
Sample ID LCS-2560	SampType: LCS	TestCode: E	PA Method	8015M/D: Die:	sel Range	e Organics				
Client ID: LCSS	Batch ID: 25601	RunNo: 3				0				
Prep Date: 6/1/2016	Analysis Date: 6/2/2016	SeqNo: 1	068194	Units: mg/Kg	J					
Analyte		e SPK Ref Val %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRC			62.6	124						
Surr: DNOP	4.1 5.00	0 82.4	70	130		The Contract State I was a series				
Sample ID MB-25600	SampType: MBLK	TestCode: E	PA Method	8015M/D: Dies	sel Range	e Organics				
Client ID: PBS	Batch ID: 25600	RunNo: 3	4632							
Prep Date: 6/1/2016	Analysis Date: 6/2/2016	SeqNo: 1	068196	Units: %Rec						
Analyte	Result PQL SPK valu	e SPK Ref Val %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: DNOP	8.7 10.0	0 87.5	70	130						
Sample ID MB-25601	SampType: MBLK	TestCode: E	PA Method	8015M/D: Dies	sel Range	e Organics				
Client ID: PBS	Batch ID: 25601	RunNo: 3				n				
Prep Date: 6/1/2016	Analysis Date: 6/2/2016	SeqNo: 1	068197	Units: mg/Kg	1					
Analyte	Result PQL SPK valu	e SPK Ref Val %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRC				<u> </u>						
Surr: DNOP	8.2 10.0	0 81.7	70	130						

Hall Environmental Analysis Laboratory, Inc.

WO#: 1605D62

06-Jun-16

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 7 of 8

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1605D62

06-Jun-16

Client:		etroleum Co	0000	ion							
Project:	Hilliard	B Federal 1	1								
Sample ID	MB-25568	Tes	TestCode: EPA Method 8015D: Gasoline Range								
Client ID:	PBS	Batch	n ID: 25	568	F	RunNo:	34598				
Prep Date:	5/31/2016	Analysis D	ate: 6	/1/2016	5	SeqNo:	1067457	Units: mg/k	٢g		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Surr: BFB	e Organics (GRO)	ND 1100	5.0	1000		112	80	120			
Sample ID	LCS-25568	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	n ID: 25	568		RunNo: 3					
Prep Date:	5/31/2016	Analysis D	ate: 6	/1/2016	ę	SeqNo: 1	1067458	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Surr: BFB	Organics (GRO)	23	5.0		0	91.1	80	120			
		1200		1000		125	80	120			S
Sample ID	MB-25547	SampT	ype: MI	3LK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: 25	547	F	RunNo: 3	34598				
Prep Date:	5/27/2016	Analysis D	ate: 6/	1/2016	S	SeqNo: 1	067478	Units: %Re	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1200		1000		118	80	120		Contraction of the second second second	
Sample ID	LCS-25547	SampT	ype: LC	S	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: 25	547		lunNo: 3			J		
Prep Date:	5/27/2016	Analysis D	ate: 6/	1/2016	S	eqNo: 1	067479	Units: %Red	•		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1300		1000		127	80	120	an a		S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 8 of 8

ENVIRONMENTAL ANALYSIS	Hall Environmental Analysis Labo 4901 Hawka Albuquerque, NM TEL: 505-345-3975 FAX: 505-345 Website: www.hallenvironmenta	ins NE 87109 Sam 5-4107	Sample Log-In Check Lis							
Client Name: Yates Petroleum Corpora Wo	rk Order Number: 1605D62		RcptNo: 1							
Received by/date: JAOS/27/16										
Logged By: Anne Thome 5/27/2	2016 9:50:00 AM	anne Ar	-							
Completed By: Anne Thorne 5/31/2 Reviewed By:	31/14	Anne Anna Anne Anna	-							
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?	Courier									
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 🗌								
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) property press	erved? 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 🗌	# of preserved bottles checked for pH:	0						
13. Are matrices correctly identified on Chain of Custod	ly? Yes 🗹	No 🗆	(<2 or >1 Adjusted?	2 unless noted)						

Special Handling (if applicable)

14. Is it clear what analyses were requested?

(If no, notify customer for authorization.)

15. Were all holding times able to be met?

Was client notified of all discrepancies with this order?	Yes No	NA 🗹
Person Notified: By Whom:	Date J Via:eMailPhoneFax In F	erson
Regarding: Client Instructions:	······	

Yes 🗹

Yes 🗹

Yes 🗹

No 🗌

No 🗌

No 🗌

Checked by:

- 17. Additional remarks:
- 18. Cooler Information

Cooler No I	emp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1 1.7	7	Good	Yes			

UALI ENVIDONMENTAL	ANALYSTS LABORATORY		60						(N	Of I	λ)) selddu8 1iA	/												ilytical report.
NIN	BOR	mo	Albuquerane. NM 87109	505-345-4107	t	-				(∀(-imə2) 0728								-		 			on the ans
		intal.	aue.	5-34	Analysis Request	_				10	-	AOV) 80828											iii		notated
2	S		Jauer	Fax 5(is Re		-	-	-			Nions (F,Cl			-	-							 Thank you!		clearly
	i Ş	lenvir	Albu	ű	naiys	-				-	-	SARD 8 Me	1	-	┢──		-	\vdash	-	┼─	-		 		will be
	A	www.haltenvironmental.com	۰ ۳	3975	A				-	-	-	ANY) 0168											 8015B.		ed data
	AN	MM	vkins	505-345-3975								EDB (Wetho													contract
	יר		4901 Hawkins NE	505-		ese	PIC/	See	-			TPH Methoc	×	×	×					-		 	 ТРН:		ny sub-o
			490	Tel.		-	-	-	-		100	RTEX + MTI		Ê	Ĥ	×	×	×		-		 	 arks:		Allty. A
			taist fam. e	·		(1)	208) s,{	BMT	+	38	RTEX + MT											 Remarks:		s possib
	-		sderal #1		504		iriffin	-2020 A	Amber Griffin AC	C No		HEAL-NO. 100513 [02	102-	202	SN2	102	572	2012	•				5/27/16 0050	a Time	accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
	d 🗆 Rush	.e:	Hilliard B Federal #1		1RP-3504	ager:	Amber Griffin	PO#205-2020		M Yes	emperature: /.	Preservativ e Type	Ice	lce	lce	lce	lce	lce .					at of		credited laboratorie
ו חונו-אוסחוות ו וונוב:	X Standard	Project Name:		Project #:		Project Manager:				On Ice:	Sample Tem	Container Type and #	1 - 4oz.	1 - 4oz.	1 - 4oz.	1 - 4oz.	1 - 4oz.	1 - 4oz.					Received by:	Received by:	
Chain-of-Custody Record	Yates Petroleum Corporation			105 South 4th Street Artesia, NM 88210	575-513-8799 or 575-748-4111	agriffin@yatespetroleum.com		Level 4 (Full Validation)				Sample Request ID	1 - Surface	1 - 1'	2 - Surface	2 - 1'	2 - 2'	2 - 3'					by: And in	1 by: ()	If necessary, samples submitted to Hall Environmental may be subcontracted to other
ot-Cus	etroleum			eet Artes	575-513-	agriffin@						Matrix						Soil					Relinquished by:	Relinquished by:	nples submitte
ain-	Yates		dress:	4th Str		:#X#:	kage:	q	:uo		(pe)	Time	7:20 Soil	7:39 Soil	7:23 Soil	7:50 Soil	7:57 Soil	8:05					Sido		essary, sai
	Client:		Vailing Address:	105 South	Phone #:	smail or Fax#:	2A/QC Package:	□ Standard	Accreditation:	D NELAP	D EDD (Type)	Date	5/25/2016	5/25/2016	5/25/2016	5/25/2016	5/25/2016	5/25/2016	· '				7/2/6//C		lf nec