

HOBBS OCD

JAN 3 0 2014

RECEIVED

1RP-12-13-2999
XTO Energy, Inc., Grimes Pit #1
January 30, 2014

INTRODUCTION

This summary is submitted to the New Mexico Oil Conservation Division (OCD) District 1 in Hobbs, New Mexico, on behalf of XTO Energy, Inc. (XTO), a subsidiary of ExxonMobil, for the investigation and closure of an unlined pit (Grimes Pit #1) that was used in conjunction with shallow wells and separation equipment by another operator, Windmill Oil Company, to recover crude oil from shallow groundwater. The pit is located in Unit G (SW/4, NE/4), Section 30, Township 18 South, Range 38 East, in Lea County, New Mexico. The geodetic position is north 32° 43' 08.19" and west 103° 11' 11.94". Figure 1 presents a topographic map. Figure 2 presents an aerial photograph.

BACKGROUND

The U.S. Bureau of Land Management (BLM), as mineral owner, was unable to locate the former operator, believed to be Windmill Oil Company, to restore the area, including plugging wells, removing equipment (i.e., tanks, vessels and piping) and closing the pit. The site reverted back to ExxonMobil as a former oil and gas mineral lessee.

On October 15, 2013, XTO submitted a closure plan meeting the requirements of 19.15.17.13(C) NMAC to the OCD in Santa Fe, New Mexico. The closure plan was approved on October 22, 2013. On December 1, 2013, after providing notification to the landowner, Watson Construction, Inc., under supervision from Larson & Associates, Inc. (LAI) removed BS&W and hydrocarbon contaminated material from the pit. The materials were disposed at Sundance Services located east of Eunice, New Mexico.

On December 2, 2013, LAI personnel collected a 5 part composite sample from the bottom of the pit. The sample was submitted under preservation and chain of custody to Permian Basin Environmental Lab (PBELAB) located in Midland, Texas. The sample was analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX) by method SW-846-8021B, total petroleum hydrocarbons (TPH), including, diesel (DRO), gasoline (GRO) and oil (ORO) range organics, by method SW-846-8015M and chloride by method E300. Table 1 presents the analytical data summary.

On December 18, 2013, the laboratory data summary was transmitted to the OCD in Santa Fe, New Mexico which requested that XTO to notify the OCD District 1 due to TPH exceeding the standard under 19.15.17.13(C).

On December 23, 2013, LAI personnel met with Mr. Geoffrey Leking, OCD District 1, to discuss the sample results and path forward. Mr. Leking requested XTO to submit an initial C-141 (Release Notification and Corrective Action) and delineate the extent of the TPH. On December 31, 2013, XTO submitted the initial C-141. The OCD District 1 assigned the site remediation action project number 1RP-12-13-2999.

Environmental Specialist

ていりい

216/14

WEB 1 0 2014

INVESTIGATION

On January 8 and 9, 2013, Scarborough Drilling, Inc. (Scarborough) used an air rotary rig and jam tube sampler to collect soil samples at 5 locations (1-1 through 1-5) in the bottom and each direction (north, south, east and west) from the center of the pit. A sample was collected about every 5 feet to 30 feet and about every 10 feet to about 50 feet below ground surface (bgs). Groundwater was determined to occur at about 60 feet bgs. The samples were collected in 4 ounce glass jars that were preserved and delivered under chain of custody to Cardinal Laboratory located in Hobbs, New Mexico. The samples were analyzed for TPH, including DRO, GRO and ORO, by method SW-846-8015M. Duplicate samples were collected in 8 ounce glass jars for headspace analysis. The headspace samples were sealed with aluminum foil and warmed on the dashboard of the vehicle before measuring the organic vapor content with a calibrated photoionization detector (PID). The sample from each boring with the highest PID reading over 100 parts per million (ppm) was analyzed for BTEX by method SW-846-8021B. Table 2 presents the laboratory analytical data summary. Appendix B presents the laboratory reports.

Referring to Table 2, benzene and BTEX were below the OCD recommended remediation action level (RRAL) of 10 and 50 milligrams per kilogram (mg/Kg), respectively, in samples from borings 1-1 through 1-5. The TPH was delineated to the vertical and lateral limits of the borings.

REMEDIATION PLAN

XTO proposes to excavate soil to approximately 7 feet bgs. A liner of at least 20 mils will be placed in the bottom of the excavation. The liner will be covered with clean soil and the excavation closed according to the reclamation plan approved by OCD in Santa Fe, on October 22, 2013.

TABLES

Table 2 Delineation Sample Analtyical Data Summary XTO Energy, Inc., Grimes Pit #1 Lea County, New Mexico

1RP-12-13-2999

Boring	Sample	Sampling		-		D-T5\\	ТРН	ТРН	TPH	TPH
Number	Depth	Date	Location	PID	Benzene	BTEX	(C6 - C10)	(>C10 - C28)	(>C28 - C35)	(C6- C35)
MOCD RRAL	•	The same of the sa		A STATE OF THE STA	10	50				1,000
1-1	15	01/08/2014	Center	352			186	2,190	414	2,790
	20	01/08/2014		75.9			<10.0	461	107	568
	25	01/08/2014		352			238	3,620	707	4,565
1	30	01/08/2014		352	,		250	3,820	774	4,844
i i	40	01/08/2014		201			103	2,620	500	3,223
	50	01/08/2014		353	0.383	23.22	821	4,720	784	6,325
1-2	5	01/09/2014	East	346			231	2,950	791	3,972
	10	01/09/2014		49			26.3	328	67.4	421.7
i	15	01/09/2014		9.5			<10.0	<10.0	<10.0	<10.0
! !	20	01/09/2014		15	,		<10.0	<10.0	<10.0	<10.0
l	25	01/09/2014		851			271	2,470	380	3,121
l	30	01/09/2014		879	<0.200	8.23	230	2,240	384	2,854
	40	01/09/2014		538			172	2,520	463	3,155
	50	01/09/2014		515			212	2,720	442	3,374
 	*60	01/09/2014					614	5,090	888	6,592
1-3	5	01/09/2014	South	2.6			<10.0	<10.0	<10.0	<10.0
	10	01/09/2014		9.7			<10.0	<10.0	<10.0	<10.0
	15	01/09/2014	!	11.5	<0.100	0.106	<10.0	10.7	<10.0	10.7
	20	01/09/2014		4.4			<10.0	<10.0	<10.0	<10.0
	25	01/09/2014					<10.0	<10.0	<10.0	<10.0
	30	01/09/2014								
	40	01/09/2014								
	50	01/09/2014								
1-4	5	01/09/2014	West	2.6			<10.0	<10.0	<10.0	<10.0

Table 2 Delineation Sample Analtyical Data Summary XTO Energy, Inc., Grimes Pit #1 Lea County, New Mexico

1RP-12-13-2999

Boring Number	Sample Depth	Sampling Date	Location	PID	Benzene	Total BTEX	TPH (C6 - C10)	TPH (>C10 - C28)	TPH (>C28 - C35)	TPH (C6 - C35)
MOCD RRAI	M. D. S.	Date	-		10	50	(CO - C10)	(>C10 - C28)	(>C28 - C33)	1,000
1-4	10	01/09/2014		285			278	3,920	802	5,000
	15	01/09/2014		379			256	3,300	657	4,213
	20	01/09/2014		93.4		1 1	<10.0	565	129	694
,	25	01/09/2014	Į.	334	<0.200	<1.2	316	3,750	762	4,828
	30	01/09/2014		232			296	4,510	892	5,698
	40	01/09/2014		183			118	3,590	679	4,387
	50	01/09/2014		209.4		1 1	242	4,000	784	5,026
					1				:	
1-5	5	01/09/2014	North	2.6			<10.0	<10.0	<10.0	<10.0
	10	01/09/2014		13.2		ļ l	<10.0	35.2	<10.0	35.2
	15	01/09/2014		0.8			<10.0	<10.0	<10.0	<10.0
	20	01/09/2014		36.2	<0.100	4.59	167	2,160	364	2,691
	25	01/09/2014		7.9	i		64	1,200	233	1,497
	30	01/09/2014		23.9			<50.0	938	156	1,094
	40	01/09/2014								
	50	01/09/2014		29.3			111	2,030	384	2,525

Notes: Samples analyzed by Cardinal Laboratories, Inc., Hobbs, New Mexcio

Samples analyzed via EPA method SW-8021B (BTEX) and SW-8015M (TPH)

Depth is in feet below ground surface (bgs).

Photionization detector (PID) values are in parts per million (ppm)

Laboratory values are in milligrams per kilogram (mg/Kg) equivalent to parts per million (ppm).

- * Sample collected at capillary frindge or groundwater
- -- No data available

Table 1
Initial Soil Sample Analtyical Data Summary
XTO Energy, Inc., Grimes Pit #1
Lea County, New Mexico

1RP-12-13-2999

Composite Sample	Sampling Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	TPH (C6 - C12)	TPH (>C12 - C28)		TPH (C6 - C35)	Chloride
19.15.17.13(3)	Standard	10	0.75	0.75	0.62	50					600
Pit #1	12/2/2013	<0.00112	<0.00225	0.00445	0.0211	0.02555	505	6,210	839	7,554	95.8

FIGURES

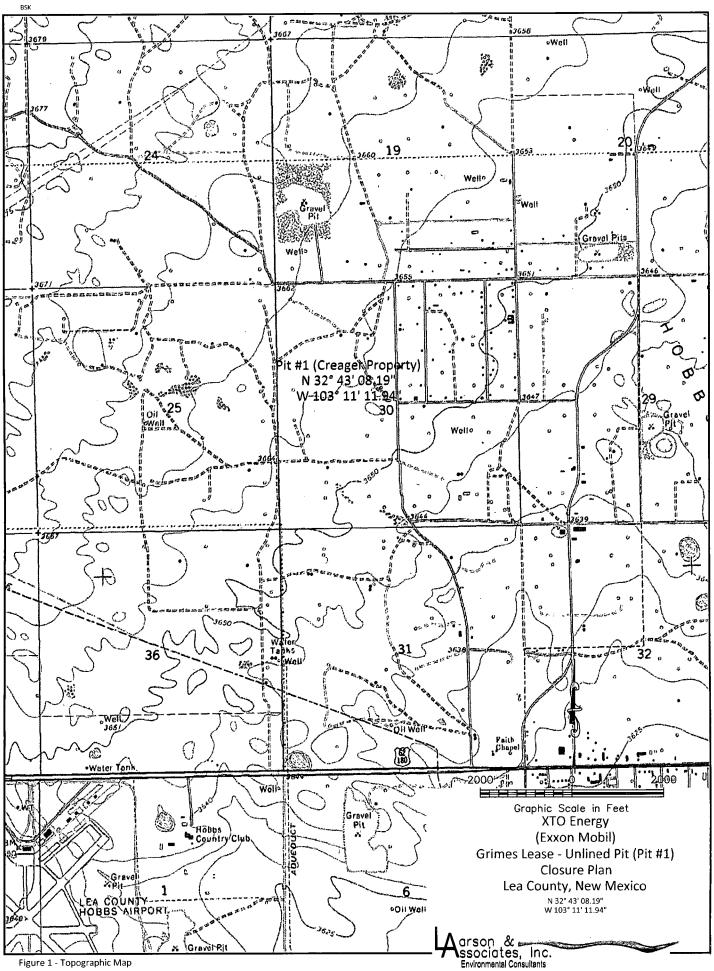


Figure 1 - Topographic Map

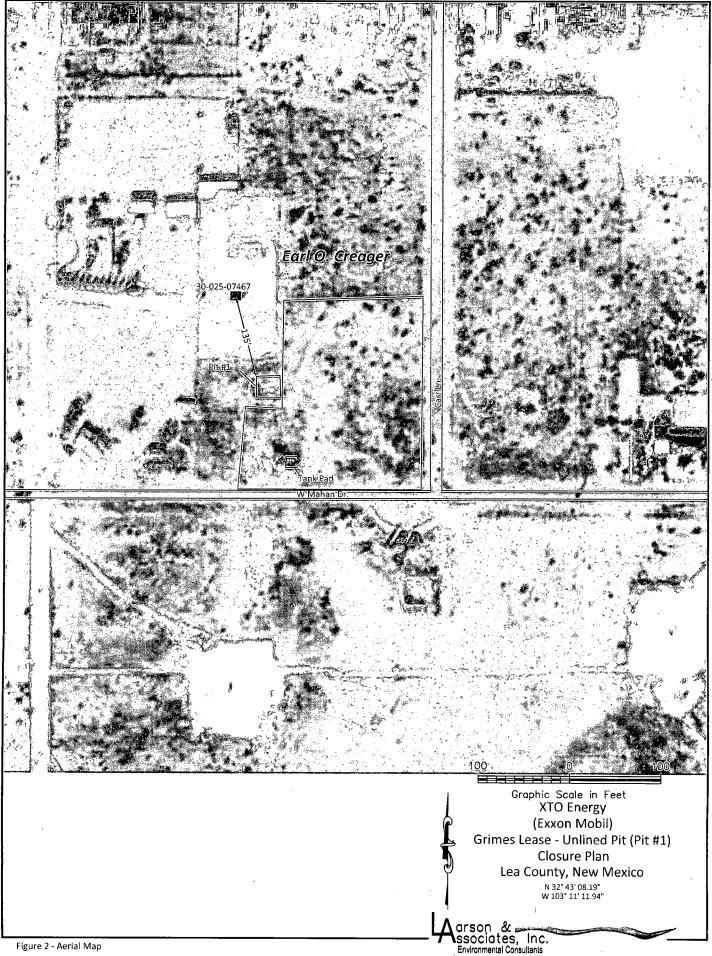
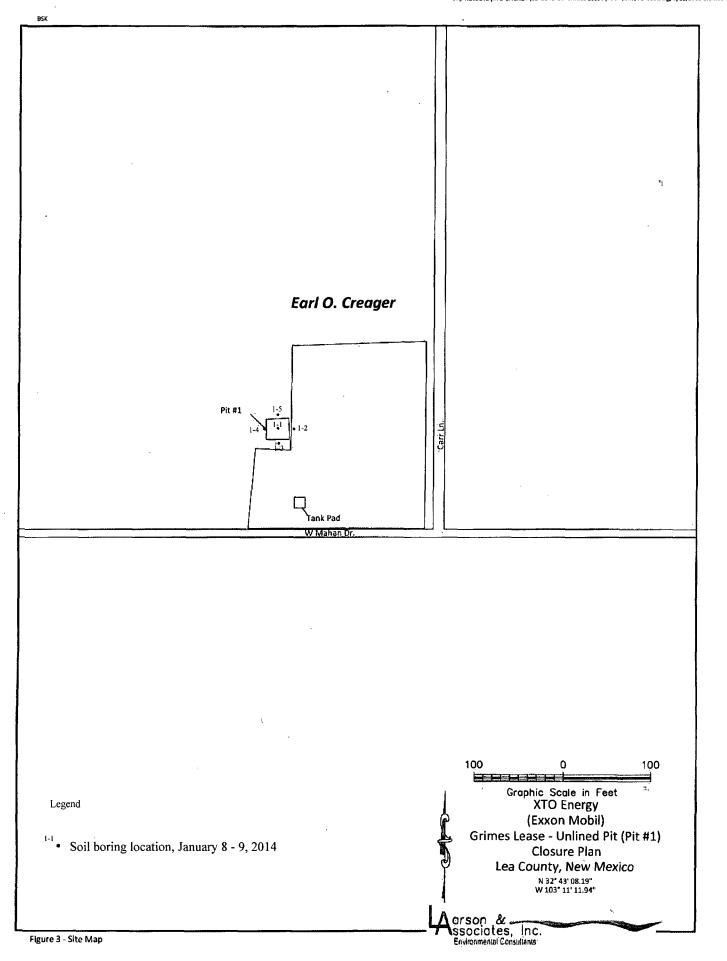


Figure 2 - Aerial Map



ATTACHMENT A

Photographs



12/11/13 Grimes Pit #1 Project No. 12-0148-02

Photo: Pit #1 before excavation commenced **Direction:** Northwest

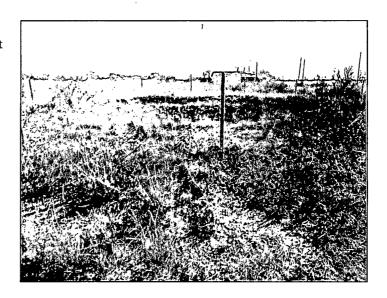


Photo: Pit during excavation

Direction: North

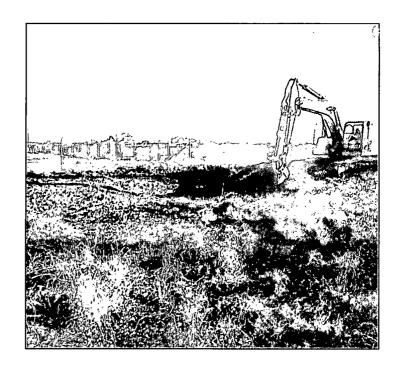


Photo: Excavation limits of pit

Direction: North

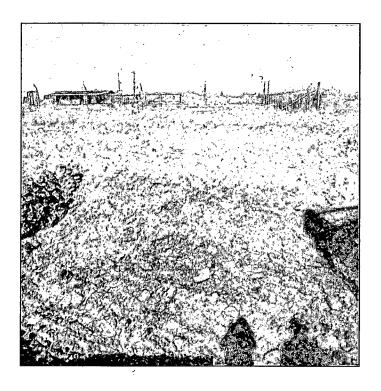
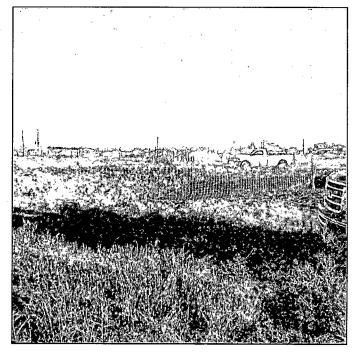


Photo: Fence surrounding pit after the completion of the excavation.

Direction: North



ATTACHMENT B

Laboratory Reports



January 14, 2014

MARK LARSON LARSON & ASSOCIATES, INC. 507 N. MARIENFELD, SUITE 200 MIDLAND, TX 79701

RE: GRIMES PIT #1

Enclosed are the results of analyses for samples received by the laboratory on 01/08/14 15:15.

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/ga/lab-accred-certif.html.

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. Keene

Lab Director/Quality Manager



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received: Reported: 01/08/2014

01/14/2014

Project Name: Project Number: GRIMES PIT #1 12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/08/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-1-15' (H400060-01)

TPH 8015M	mg/k	kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	186	50.0	01/11/2014	ND	190	94.8	200	1.69	
DRO >C10-C28	2190	50.0	01/11/2014	ND	195	97.7	200	2.06	
EXT DRO >C28-C35	414	50.0	01/11/2014	ND					
Surrogate: 1-Chlorooctane	93.1 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	165 %	63.6-15	4						

Sample ID: 1-1-20' (H400060-02)

TPH 8015M	mg/	'kg	Analyze	d By: ms		,			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/11/2014	ND	190	94.8	200	1.69	
DRO >C10-C28	461	.10.0	01/11/2014	ND	195	97.7	200	2.06	
EXT DRO >C28-C35	107	10.0	01/11/2014	ND					
Surrogate: 1-Chlorooctane	104 9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	1149	% 63.6-15	4						

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or cort, 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 claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This

Celey L. Kuna



LARSON & ASSOCIATES, INC. MARK L'ARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/08/2014

01/14/2014

Reported: Project Name:

GRIMES PIT #1 12-0148-02

Project Number:

Sampling Date:

01/08/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

63.6-154

Project Location:

NOT GIVEN

190 %

Sample ID: 1-1-25' (H400060-03)

TPH 8015M	mg	/kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	238	100	01/11/2014	ND	190	94.8	200	1.69	
DRO >C10-C28	3620	100	01/11/2014	ND	195	97.7	200	2.06	
EXT DRO >C28-C35	707	100	01/11/2014	ND					
Surrogate: 1-Chlorooctane	98.4	% 65.2-14						-	

Sample ID: 1-1-30' (H400060-04)

Surrogate: 1-Chlorooctadecane

TPH 8015M	mg/	kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	250	100	01/11/2014	ND	190	94.8	200	1.69	
DRO >C10-C28	3820	100	01/11/2014	ND	195	97.7	200	2.06	
EXT DRO >C28-C35	774	100	01/11/2014	ND					
Surrogate: 1-Chlorooctane	115 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	187 %	63.6-15	4						

Cardinal Laboratories

*=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 welved 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.

Celey D. Keene



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/08/2014

Sampling Date:

01/08/2014

Reported:

01/14/2014

Sampling Type:

Soil

Project Name:

GRIMES PIT #1

Sampling Condition:

Cool & Intact

Project Number:

12-0148-02

Sample Received By:

Jodi Henson

Project Location:

NOT GIVEN

Sample ID: 1-1-40' (H400060-05)

TPH 8015M	mg/k	(g	Analyze	d By: ms					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	103	100	01/11/2014	ND	190	94.8	200	1.69		
DRO >C10-C28	2620	100	01/11/2014	ND	195	97.7	200	2.06		
EXT DRO >C28-C35	500	100	01/11/2014	ND						
Surrogate: 1-Chlorooctane	99.8 %	65.2-14	0				•			
Surrogate: 1-Chlorooctadecane	193 %	63.6-15	4							

*=Accredited Analyte Cardinal Laboratories

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 PLEASE NOTE: Ladinity and Datingses. Cardinals industry and clients exclusive relineary of any client in 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 sevence. 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.

Celly D. Kenne



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/08/2014

Reported:

01/14/2014

Project Name: Project Number: **GRIMES PIT #1** 12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/08/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-1-50' (H400060-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.383	0.250	01/13/2014	ND	2.09	105	2.00	3.68	
Toluene*	1.18	0.500	01/13/2014	ND	2.06	103	2.00	3.76	
Ethylbenzene*	9.66	0.500	01/13/2014	ND	2.10	105	2.00	3.52	
Total Xylenes*	12.0	1.50	01/13/2014	ND	6.12	102	6.00	3.11	
Total BTEX	23.2	2.75	01/13/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	182 %	6 89.4-12	16						
TPH 8015M	mg/l	kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	821	100	01/11/2014	ND	190	94.8	200	1.69	
DRO >C10-C28	4720	100	01/11/2014	ND	195	97.7	200	2.06	
EXT DRO >C28-C35	784	100	01/11/2014	ND					
Surrogate: 1-Chlorooctane	167 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	182 %	63.6-15	4						

Cardinal Laboratories

*=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 (33) 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,

Celey D. Kuns



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.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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 SM4500Cl-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

Cardinal Laboratories *=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 claims 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 Liboratories.

Clay D. Kens

						· · .					·			<u></u>			:					С	H	<u> </u>	N -	о О	F-(CU	<u>5</u> 1		<u>}</u>
	A GISON A SSOCIAL Environment Data Reported to:	Ses, Inconsulta	C.			507 N	Nidlan	rienfe d, TX 687-	797	01	200	P P	O #: ROJ	ECT	LO	CAT	ION	0RN	IVIAN	=:		<u> </u>	767.	150		r	7*	77 <u>)</u>			rage / oi
	TRRP report? Yes No TIME ZONE: Time zone/State: NM Field Sample I.D.	S=SOIL W=WATE A=AIR	R SL=S	AINT SLUDGE OTHER	Matrix	# of Containers		HNO ₃		RVED	ANA SUP	6 / 8 / 8 / 8 / 8 / 8 / 8 / 8 / 8 / 8 /																FIEL		,	<u> </u>
ころとうつ	1-1-15' 1-1-20' 1-1-25' [-1-30' 1-1-40' 1-1-50'		1/8	131 140 150 200 205 240	5				X																		Sh	ay)	\	Fron	<u>6</u>
	STOTAL				15																										
	RELINQUISHED BY: RELINQUISHED BY:	(Signature)	3	DATE/TI	ME	RECE	IVED		ignatu	ıre)	9N			NO 11 2 1	ORM DAY DAY	AL 🛄	,	TIME	RE CL		ING T DY SE RIER	TEMF EALS BILL	# RED	5. <u>6</u> 1 BR	2 OKE					T USE	_



January 17, 2014

MARK LARSON
LARSON & ASSOCIATES, INC.
507 N. MARIENFELD, SUITE 200
MIDLAND, TX 79701

RE: GRIMES PIT #1

Enclosed are the results of analyses for samples received by the laboratory on 01/09/14 16:20.

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/ga/lab_accred_certif.html.

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.

Celeg D. Keena

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. Keene

Lab Director/Quality Manager



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/09/2014

Reported:

01/17/2014 GRIMES PIT #1

Project Name: Project Number:

12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-2-5' (H400084-01)

TPH 8015M	mg/k	g	Analyze	d By: ms		. "			S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	231	50.0	01/12/2014	ND	170	84.8	200	9.62		
DRO >C10-C28	2950	50.0	01/12/2014	ND	170	84.8	200	13.1		
EXT DRO >C28-C35	791	50.0	01/12/2014	ND						
Surrogate: 1-Chlorooctane	94.8 %	65.2-14	0							
Surrogate: 1-Chlorooctadecane	163 %	63.6-15	4 .							

Sample ID: 1-2-10' (H400084-02)

TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	26.3	10.0	01/12/2014	ND	170	84.8	200	9.62	
DRO >C10-C28	328	10.0	01/12/2014	ND	170	84.8	200	13.1	
EXT DRO >C28-C35	67.4	10.0	01/12/2014	ND					
Surrogate: 1-Chlorooctane	76.3 %	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	84.7 %	% 63.6-15	4						

Cardinal Laboratories

*=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 varied unless made in writing and received by Cardinal within thirty (33) 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.

Celey D. Keens



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/09/2014

01/17/2014

Reported: Project Name:

GRIMES PIT #1

Project Number: Project Location: 12-0148-02 **NOT GIVEN**

Sample Received By:

Sampling Date:

Sampling Type:

01/09/2014

Soil

Sampling Condition:

Cool & Intact

Jodi Henson

Sample ID: 1-2-15' (H400084-03)

TPH 8015M	mg/l	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/12/2014	ND	170	84.8	200	9.62	
DRO >C10-C28	<10.0	10.0	01/12/2014	ND	170	84.8	200	13.1	
EXT DRO >C28-C35	<10,0	10.0	01/12/2014	ND					
Surrogate: 1-Chlorooctane	78.0 %	65.2-14	10						
Surrogate: 1-Chlorooctadecane	90.0%	63.6-15	4						

Sample ID: 1-2-20' (H400084-04)

TPH 8015M	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/12/2014	ND	170	84.8	200	9.62	
DRO >C10-C28	<10.0	10.0	01/12/2014	ND	170	84.8	200	13.1	
EXT DRO >C28-C35	<10.0	10.0	01/12/2014	ND					
Surrogate: 1-Chlorooctane	93.6	% 65.2-14	0					-	
Surrogate: 1-Chlorooctadecane	102	% 63.6-15	4						

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's lability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount pad 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 chaim 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 Laboratones.

Celeny D. Keens



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received: Reported: 01/09/2014

01/17/2014

GRIMES PIT #1

Project Number: Project Location:

Project Name:

12-0148-02 NOT GIVEN Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-2-25' (H400084-05)

TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	271	50.0	01/12/2014	ND	170	84.8	200	9.62	
DRO >C10-C28	2470	50.0	01/12/2014	ND	170	84.8	200	13.1	
EXT DRO >C28-C35	380	50.0	01/12/2014	ND					
Surrogate: 1-Chlorooctane	133 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	147 %	63.6-15	4						

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's lability 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 analysiss. All claims, including those for negligence and any other cause whatsoever shall be deemed weived 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.

Celey D. Keens



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/09/2014

Reported:

01/17/2014 GRIMES PIT #1

Project Name: Project Number:

12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

1 . d: 11

Jodi Henson

Sample ID: 1-2-30' (H400084-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	01/14/2014	ND	1.97	98.7	2.00	5.22	
Toluene*	<0.200	0.200	01/14/2014	ND	1.91	95.6	2.00	6.25	
Ethylbenzene*	1.90	0.200	01/14/2014	ND	1.95	97.7	2.00	5.02	
Total Xylenes*	6.33	0.600	01/14/2014	ND	5.73	95.4	6.00	4.47	
Total BTEX	8.23	1.20	01/14/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIE	178 9	6 89.4-12	16				7		
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	230	50.0	01/12/2014	ND	170	84.8	200	9.62	
DRO >C10-C28	2240	50.0	01/12/2014	ND	170	84.8	200	13.1	
EXT DRO >C28-C35	384	50.0	01/12/2014	ND					
Surrogate: 1-Chlorooctane	1169	65.2-14	0						
Surrogate: 1-Chlorooctadecane	125 %	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or toxt, shall be kinked to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatspeever 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 lable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by Cient, es subcidiaries, saffiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This reproduced except in full with written analyzed cardinal aboversaries.

Celey D. Keene



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received: Reported: 01/09/2014

01/17/2014

GRIMES PIT #1

Project Name: Project Number: Project Location:

12-0148-02

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

BS

170

170

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-2-40' (H400084-07)

TPH 8015M

mg/kg

Result

172

2520

Analyzed By: ms

Analyzed

01/12/2014

01/12/2014

01/12/2014

Method Blank

ND

ND

ND

% Recovery

84.8

84.8

True Value QC 200

200

Qualifier

RPD

9.62

13.1

DRO >C10-C28

GRO C6-C10

EXT DRO > C28-C35

Analyte

463

Surrogate: 1-Chlorooctadecane

Surrogate: 1-Chlorooctane

107 % 143 % 65.2-140 63.6-154

Reporting Limit

50.0

50.0

50.0

Sample ID: 1-2-50' (H400084-08)

TPH 8015M	mg/l	kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	212	100	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	2720	100	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	442	100	01/13/2014	ND					
Surrogate: 1-Chlorooctane	105 %	65.2-14	10						-
Surrogate: 1-Chlorooctadecane	198 %	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's lability and client's exclusive remedy for any claim ansing, 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.

alex D. Kens



LARSON & ASSOCIATES, INC. 507 N. MARIENFELD, SUITE 200 MARK LARSON

Project Location: Project Number: Project Name: Reported: Received: 12-0148-02 NOT GIVEN 01/09/2014 GRIMES PIT #1 01/17/2014 Fax To: MIDLAND TX, 79701 Sampling Condition: Sampling Type: Sampling Date: Sample Received By:

Soil

01/09/2014

Jodi Henson Cool & Intact

Sample ID: 1-2-60' (H400084-09)	84-09)								
TPH 8015M	mg/kg	kg	Analyze	Analyzed By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	RPD Qualifier
GRO C6-C10	614	100	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	5090	100	01/13/2014	N	210	105	200	0.318	
EXT DRO >C28-C35	888	100	01/13/2014	ND					
Surrogate: 1-Chlorooctane	158 %	% 65.2-140	0						:

Surrogate: 1-Chlorooctadecane

180 %

63.6-154

Sample ID: 1-3-5' (H400084-10)	4-10)			•					
TPH 8015M	mg/kg	/kg	Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/13/2014	N	194	96.9	200	1.27	
DRO >C10-C28	<10.0	10.0	01/13/2014	N	210	105	200	0.318	
EXT DRO >C28-C35	<10.0	10.0	01/13/2014	ND					
Surrogate: 1-Chlorooctane	71.2 %	% 65.2-140	10						
Surrogate: 1-Chlorooctadecane	80.5 %	% 63.6-154	54						

Cardinal Laboratories

*=Accredited Analyte

PLECE NUTE: Lability and Clansigles. Cardnell's lability and client's exclusive renergy for any claim arising, whether based in contract or text, shall be limited to the amount pold by cheer for analyses. All chairs because it is not because the completion of the applicable service. In no event shall Cardnell be the incidental or consequential damapses, including, without fination, business interruptions, loss of use, or loss of yorks incurred by client, its subsidiaries, affigues or successors arising out of or related to the performance of the services hereunder by Cardnell, repartiess of whether sum claim is based upon any of the above stated resorts or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardnel Laboratories.

aling & Ku



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/09/2014

Reported:

01/17/2014

Project Name: Project Number: GRIMES PIT #1 12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

210

105

Soil

200

Sampling Condition:

Cool & Intact

RPD

1.27

0.318

Qualifier

Sample Received By:

Jodi Henson

Sample ID: 1-3-10' (H400084-11)

TPH 8015M

DRO >C10-C28

EXT DRO >C28-C35

mg/kg

Analyzed By: ms

ND

ND

Reporting Limit Analyzed Method Blank True Value QC Analyte Result BS % Recovery 10.0 01/13/2014 GRO C6-C10 <10.0 ND 194 96.9 200

01/13/2014

01/13/2014

Surrogate: 1-Chlorooctane 78.2 %

Surrogate: 1-Chlorooctadecane

87.3 %

<10.0

<10.0

65.2-140

10.0

10.0

63.6-154

Cardinal Laboratories

*=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 (33) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequencial damages, michuling, without kimdation, business interruptions, loss of use, or loss of porfits 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 thain is based upon any of the above stated reasons or otherwise. Results relate only to the samples indentified above. This

Celey D. Keene



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/09/2014

Reported:

01/17/2014

Project Name: Project Number: GRIMES PIT #1 12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-3-15' (H400084-12)

g/kg	Analyzed By: MS

	91	9							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	01/17/2014	ND	1.97	98.7	2.00	5.22	
Toluene*	0.106	0.100	01/17/2014	ND	1.91	95.6	2.00	6.25	
Ethylbenzene*	<0.100	0.100	01/17/2014	ND	1.95	97.7	2.00	5.02	
Total Xylenes*	<0.300	0.300	01/17/2014	ND	5.73	95.4	6.00	4.47	
Total BTEX	<0.600	0.600	01/17/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	106 %	6 89.4-12	Ġ						
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	10.7	10.0	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	<10.0	10.0	01/13/2014	ND					
Surrogate: 1-Chlorooctane	92.3 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	93.7 %	63.6-15	4						

Cardinal Laboratories

*=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 (32) 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.

Celegit Kurs



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/09/2014

Reported:

01/17/2014

Project Name: Project Number: **GRIMES PIT #1** 12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-3-20' (H400084-13)

TPH 8015M	mg/l	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	<10.0	10.0	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	<10.0	10.0	01/13/2014	NĐ					
Surrogate: 1-Chlorooctane	90.9 %	6 65.2-14				Laboratoria			
Surrogate: 1-Chlorooctadecane	89.4%	63.6-15	4						

Sample ID: 1-3-25' (H400084-14)

TPH 8015M	mg/kg		Analyzed By: ms				<u>:</u> _		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	<10.0	10.0	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	<10.0	10.0	01/13/2014	ND					
Surrogate: 1-Chlorooctane	82.9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	90.1	% 63.6-15	4				٠		

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or toxt, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cases whatsoever shall be deemed waved unless made in writing and received by Cardinal writing and writing and received by Cardinal writing and writing and

Celey D. Keens



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/09/2014

01/17/2014

Reported: Project Name:

GRIMES PIT #1 12-0148-02

Project Number: Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

cool & Inte

Jodi Henson

Sample ID: 1-4-5' (H400084-15)

TPH 8015M	<i>)</i> mg/	'kg	Analyze	d By: ms					,
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	. <10.0	10.0	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	<10.0	10.0	01/13/2014	ND					
Surrogate: 1-Chlorooctane	76.8	% 65.2-14	0				-		
Surrogate: 1-Chlorooctadecane	85.5	% 63.6-15	·1						

Sample ID: 1-4-10' (H400084-16)

TPH 8015M	mg/	kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	278	100	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	3920	100	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	802	100	01/13/2014	ND					
Surrogate: 1-Chlorooctane	78.5 %	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	174 %	63.6-15	4						

Cardinal Laboratories

*=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 claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This

Cley D. Kens

Celey D. Keene, Lab Director/Quality Manager

Page 11 of 23



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received: Reported: 01/09/2014

01/17/2014

GRIMES PIT #1

Project Number:

Project Name:

12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-4-15' (H400084-17)

TPH 8015M	mg/k	kg .	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	256	100	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	3300	100	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	657	100	01/13/2014	ND					
Surrogate: 1-Chlorooctane	79.7 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	161 %	63.6-15	4						

Sample ID: 1-4-20' (H400084-18)

TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	565	10.0	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	129	10.0	01/13/2014	ND					
Surrogate: 1-Chlorooctane	89.0 %	% 65.2-14	0			`			
Surrogate: 1-Chlorooctadecane	99.3 %	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim ansing, whether based in contract or toxt, 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 (32) days after completion of the applicable service. In no event shall Cardinal be lable 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 claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This

Celey D. Keens



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To: ? • • •

Received:

01/09/2014

01/17/2014

Reported: Project Name: Project Number:

GRIMES PIT #1 12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Soil

Sampling Type: Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-4-25' (H400084-19)

BTEX 8021B	mg,	mg/kg		Analyzed By: MS				•		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.200	0.200	01/14/2014	ND	1.97	98.7	2.00	5.22		
Toluene*	<0.200	0.200	01/14/2014	ND	1.91	95.6	2.00	6.25		
Ethylbenzene*	<0.200	0.200	01/14/2014	ND	1.95	97.7	2.00	5.02		
Total Xylenes*	<0.600	0.600	01/14/2014	ND	5.73	95.4	6.00	4.47		
Total BTEX	<1.20	1.20	01/14/2014	ND						

TPH 8015M	mg,	/kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	316	100	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	3750	100	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	762	100	01/13/2014	ND					

Surrogate: 1-Chlorooctane 96.2 % 65.2-140 Surrogate: 1-Chlorooctadecane 218 % 63.6-154

Cardinal Laboratories

*=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 (33) 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.

Clay & Kenne



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/09/2014

01/17/2014

Reported: Project Name:

GRIMES PIT #1

Project Number:

12-0148-02

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Project Location:

NOT GIVEN

Sample ID: 1-4-30' (H400084-20)

TPH 8015M	mg/kg		Analyzed By: ms				-	S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10	296	100	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	4510	100	01/13/2014	. ND	210	105	200	0.318	
EXT DRO >C28-C35	892	100	01/13/2014	ND					
Surrogate: 1-Chlorooctane	107	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	180	% 63.6-15	4						

Sample ID: 1-4-40' (H400084-21)

TPH 8015M	mg/	kg	Analyze	d By: ms				. S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	118	100	01/17/2014	ND	194	96.9	200	1.27		
DRO >C10-C28	3590	100	01/17/2014	ND	210	105	200	0.318		
EXT DRO >C28-C35	679	100	01/17/2014	ND		,				
Surrogate: 1-Chlorooctane	112 %	% 65.2-14								
Surrogate: 1-Chlorooctadecane	150 %	% 63.6-15	4					•		

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or toxt, 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 (3.0) days after completion of the applicable service. In no event shall Cardinal be label 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.

Celeg D. Keene



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/09/2014

Reported: Project Name: 01/17/2014 **GRIMES PIT #1**

Project Number:

12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-4-50' (H400084-22)

TPH 8015M	mg/kg		Analyzed By: ms					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	242	100	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	4000	100	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	784	100	01/13/2014	ND					
Surrogate: 1-Chlorooctane	110 %	65.2-14	0						-
Surrogate: 1-Chlorooctadecane	184 %	63.6-15	4						

Sample ID: 1-5-5' (H400084-23)

TPH 8015M	mg/kg		Analyzed By: ms						
Analyte	Result _.	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	<10.0	10.0	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	<10.0	10.0	01/13/2014	ND					
Surrogate: 1-Chlorooctane	88.0	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	99.8	% 63.6-15	4						

Cardinal Laboratories

*=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 (33) 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.

Celeg D. Keene



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/09/2014

Reported:

01/17/2014

Project Name: Project Number: **GRIMES PIT #1** 12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-5-10' (H400084-24)

TPH 8015M	mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	35.2	10.0	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	<10.0	10.0	01/13/2014	ND					
Surrogate: 1-Chlorooctane	101 %	6 65.2-14	0		•				
Surrogate: 1-Chlorooctadecane	101 %	63.6-15	4						

Sample ID: 1-5-15' (H400084-25)

TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte _.	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	<10.0	10.0	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	<10.0	10.0	01/13/2014	ND					
Surrogate: 1-Chlorooctane	93.8 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	106 %	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whiteher 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.

Celley D. Kuno



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To: ?-.

Received:

01/09/2014

Reported:

01/17/2014

Project Name: Project Number: **GRIMES PIT #1** 12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-5-20' (H400084-26)

BTEX 8021B	mg/	kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	01/15/2014	ND	2.17	108	2.00	1.01	
Toluene*	<0.100	0.100	01/15/2014	ND	2.13	106	2.00	0.607	
Ethylbenzene*	0.987	0.100	01/15/2014	ND	2.15	108	2.00	0.331	
Total Xylenes*	3.61	0.300	01/15/2014	ND	6.38	106	6.00	0.537	
Total BTEX	4.59	0.600	01/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIC	173 %	6 89.4-12	6				,		
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	167	50.0	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	2160	50.0	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	364	50.0	01/13/2014	ND		`			
Surrogate: 1-Chlorooctane	115 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	rrogate: 1-Chlorooctadecane 130 % 63.6-15		4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remetly for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including trose for negligence and any other cause whatsoever shall be deemed waived unless made in winting and received by Cardinal within thirty (33) 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 incidental or consequential damages, and claims are all cardinal and control or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results related above. This

Celeg D. Keens



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received: Reported: 01/09/2014

01/17/2014

Project Name: Project Number: GRIMES PIT #1 12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-5-25' (H400084-27)

TPH 8015M	mg/l	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	64.0	50.0	01/13/2014	ND	194	96.9	200	1.27	
DRO >C10-C28	1200	50.0	01/13/2014	ND	210	105	200	0.318	
EXT DRO >C28-C35	233	50.0	01/13/2014	ND					
Surrogate: I-Chlorooctane	93.9 %	6 65.2-14	10						
Surrogate: 1-Chlorooctadecane	136 %	63.6-15	14						

Sample ID: 1-5-30' (H400084-28)

TPH 8015M	mg/l	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	01/14/2014	ND	185	92.4	200	6.28	
DRO >C10-C28	938	50.0	01/14/2014	ND	192	96.2	200	8.34	
EXT DRO >C28-C35	156	50.0	01/14/2014	ND					
Surrogate: 1-Chlorooctane	80.7 %	6 65.2-14	0						
Surrogate: 1-Chlorooctadecane	135 %	63.6-15	4						

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's lability 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

Celeg D. Kenn



LARSON & ASSOCIATES, INC. MARK LARSON 507 N. MARIENFELD, SUITE 200 MIDLAND TX, 79701

Fax To:

Received:

01/09/2014

Reported:

01/17/2014 **GRIMES PIT #1**

Project Name: Project Number:

12-0148-02

Project Location:

NOT GIVEN

Sampling Date:

01/09/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 1-5-50' (H400084-29)

TPH 8015M	mg/	kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	111	50.0	01/14/2014	ND	185	92.4	200	6.28	
DRO >C10-C28	O >C10-C28 2030 50.0		01/14/2014	ND	192	96.2	200	8.34	
EXT DRO >C28-C35	384	50.0	01/14/2014	ND					
Surrogate: 1-Chlorooctane	98.6 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	rrogate: 1-Chlorooctadecane 160 % 63.6-1		4						

Cardinal Laboratories

*=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 (32) 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 subclidairies, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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.

Celey D. Kuno



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.

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

QM-4X The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or .

greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

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 SM4500Cl-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

Cardinal Laboratories

*=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 walved unless made in writing and received by Cardinal within thirty (33) days after completion of the applicable service. In no event shall Cardinal be lable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurrently dient, is subdidaries, affiliations 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.

Celeg D. Keens

															,						C	H <i>/</i>	411	V-(ÖF	<u>C</u>	US	
	0 4				507 l		·	נ_ו_ו	C1-	200		DATE	Ξ:	1/	9	14		٠	<u> </u>							AGE		OF 2 5
A arson ssocial Environment	tas Ind						nd, T				- -	°O#		ا. <u>خ</u>				• •	_ LA	B W	ORK	(OI	RDE	R#	:	H4	DC	70274 ½
Environment	al Consulta	nts	•				2-687			:	1	PRO	JEC	T LC	CA	ΓΙΟΝ	OR	NAM	E:_	<u>~ (</u>	4/1/	nes	; j)	11	#	<u> </u>	/A 1-	Page
Data Reported to:	 -	· · · · ·								·	<u> </u>	_AI P	PRO	JEC ⁻	Γ#:	16) - U	190	- C	<u>_</u>	······································	_ C(OLL	ECT	OR:	<i></i>	40	
TRRP report?	S=SOIL W=WATER A=AIR	R SL=	AINT SLUDGE OTHER			PR	ESEF	Т	TION				·. /		100					/								
TIME ZONE: Time zone/State:		:			iners			NaCh	UNPRESERVED		ع ناب							, & & }									//	
		14	.,		# of Containers			<u>ק</u>	RESE	4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1														//	//		
Field Sample I.D.	Lab#	Date	Time	Matrix	# of	모	HNO	<u> </u>	팀	A S	*/* */*/						? <i>}</i> ?		\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\\\ \\&\		*/°				/ F	FIELD	NOTES
-2-5'		1/9	930	S	1			X	(X										Ť				(strai	aht	from-field
1-2-10'		/	935	5	1		<u> </u>	\perp	ş		1									-							91	
1-2-15'			940		\coprod						Ш									_ [٠.						
1-2-20'		. .	955	<u> </u>	1			$\perp \! \! \! \! \! \! \! \! \perp \! \! \! \! \! \! \! \! \! \!$	<u> </u>					-	<u> </u> .	$\perp \perp$	<u> </u>			<u> </u>	<u> </u>	<u> </u>			,			· · · · · · · · · · · · · · · · · · ·
1-2-25			1001	_	\coprod			-11			<u> </u>	1			_		1			·			:			•	\perp	
1-2-30	ļ		1602		$\downarrow \downarrow$			$\perp \!\!\! \downarrow$	<u> </u>	×		_			_	11				_					╝		_	
1-2-10			1067	<u> </u>	$\perp \downarrow$				<u> </u>		1-	<u> </u>			<u> </u>					<u> </u>		L			1	٠		
1-2-50'			1025		\coprod		-		<u> </u>		\perp			1	┸					_ _			Ŀ					
1-2-60'			1035		$\bot \bot$			4		\sqcup	$\perp \!\!\! \perp$	-					_ .		<u> </u>								\perp	
1-3-5	/	_	200		$\bot \bot$		-		_		$\bot\!\!\!\!\!\bot$	ļ <u>.</u>				-				_					_		\perp	
1-3-10'			202						_		$\perp \! \! \perp$				\bot					_	1_	<u> </u>					_	
1-3-15'			205			-		-11		X					4	\bot	_	╄		-		L		_	_			
1-3-20		1	217	-	\bot	-		- -			+			-	_		_	_		_	-	<u> </u>		1	\perp		. !	
1-3-25	ļ	 	355		1		1	$\parallel \parallel$	\coprod			-		_	-	+	_			_	\perp	_			\bot			\
WELLEY					13		$\vdash \vdash$		4	+	1	-		_	-	-		ļ.		-	-	'		_	-		_	ч
OTAL RELINQUISHED BY:			4:2	<i>D</i> 。 ME	AREC!	EIVED) BV:	Side	aturo	\coprod								-		L_		<u></u>	Щ				-	
RELINQUISHED BY:			DATE/TI 1/9/ DATE/TI	14 (REC	CLIVED	BY:	(Sign	10 ature	10	n		- i	TURN NORM 1 DAY	IAL [OUND]	TIME	RI	ECEI	ATOF	TEMF	e D	.7	<u> </u>	THEF	RM #: _	5	4
RELINQUISHED BY:	(Signature)	· .	DATE/TI	IME	RECI	EIVEC	BY:	(Sign	ature)			2	DAY	-	٠			CAR	RIER	BILL	#		OKE	N 🖸	INTAC	T Q	MOT USED
													٦.					10	HAN	D DEI	_IVEF	RED						•

				· · · ·								٠.			· i								<u>Cl</u>	1/	<u>IN</u>	<u> -(</u>	\underline{C}	F-CUS	<u> </u>	12 K
Aarson & ssociat	X ·				507 1	۷. Ma ۸idlaı					0		ATE:) #:		1/	<u> 1</u>	4	<u> </u>		L	AB			•			F	PAGE_ 7	- OF	7 ७[
TSSOCIAT Environmental	es, Ind al Consulta	C ants			./\		:-687					PF	ROJ	EC ⁻	F LO	CAT	ION	ÖR	NA	ME:	<u>C</u>	iny	n é s	<u>.</u>	p.	1	土	<i>J</i>]ag
Data Reported to:											*	LΑ	l Pi	२०	ECT	#:	12	<u>- 01</u>	46.	02		•.			LLE				J	
TRRP report?	S=SOIL W=WATE A=AIR	R SL=	AINT SLUDGE OTHER			PRI	ESEF	1		-	٠		/													/ / / / / / / / / / / / / / / / / / /	100/0/S			//
TIME ZONE: Time zone/State: Mountain /WM		·		1	Containers			י בי	UNPRESERVED		عاد	6 /2/					\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\										\$\\ \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
Field Sample I.D.	Lab #	J낙 Date	Time	Matrix	# of Cor	HCI	HNO	2021 1	UNPRE	4							10/3 8/2) /	/	FIELC	NOTES	3
Q 3245)		29		5	1		-	D			X			1	1					Ť			Ť			1	\exists	Straight	from	heid
1-4-6	, '	1/9	100							-									:	+						+				
1-4-18'	` .		102		$\vdash \downarrow$	+	-			+-	#			_						-	-			· -		_	_			<u> </u>
1-4-15	<u> </u>		105	-	+	1.1		+	-	┼-	-		-	+	- -	<u> </u>		_	+	ļ.	<u> </u>					+	4	· · · · · ·		
1-4-20	<u> </u>	-	120	 	-	+	+	\perp	4		+	$\left\{ \cdot \right\}$		4	 	+			+	 -	-	_			_	+	$\frac{1}{2}$		·	
1-4-25'			130		+	+		+	\vdash	×	+	\vdash		\dashv		+		- -	+	-	-					+	\dashv		-	
1-4-30'								+	-	-	H	\vdash		+	-		-			-	+-			-		+			·	<u> </u>
1-4-40			130		++		-	\dashv		+	╁		-	_		· ·			+	-	-	\vdash	·	_	-	+	\dashv		-	
1-5-5'	<u> </u>	-	1105	 				+		+	╫					+			+	-				_		+	\dashv			
1-5-10			1115	1	+			╫	+	-	$\dagger \dagger$	-	\dashv			+			+		+		·	-		+	\dashv		<u> </u>	
1-5-15'			11/30		++			- -	+-	+	$\dagger \dagger$		+	+	+	+		+	+	-	+					+	\dashv		+	
1-5-20'	-		1135	1.			1		+	×	$\parallel \parallel$			\dashv	-	1		+	-	\dagger	1.	Ė			+	+	\dashv		1	,-
1-5-25'			1140		\top				-					7						-	+				+	\dagger	\dashv		1.	
TOTAL TOTAL		W		1:20							T										T					十	7			
RELINQUISHED BY:			DATE/T DATE/T	19/14 ME/14	REC		AL BY:	(Sigr	natur	VL e)	Sø	m	· ·	- N	TURN IORM DAY	AL 🗖		TIM			EIVIN	G TE	EMP:	L	.7			ERM #: 5	1 1 1 1 1 1 1 1 1 1	SED
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)											THE		•			□ c/	ARRII	ER B	ILL#	#		<u> </u>								

660.441.4440



101 East Marland, Hobbs, NM 88240 (E7E) 303-2326 EAY (E7E) 303-2476

Company Name	Larson				1			8/	LLTO				•		ANA	LYSIS	RE	QUE	ST	<u> </u>	<u> </u>	·
Project Manage	r:			, .		P.O.	#:															
Address:						Con	pany	y:					٠. ٠									
City:	State:	Zij): 			Attn	i								*							
Phone #:	Fax #:					Add	ress	:					·				ŀ					
Project #:	Project Own	er:		<u>.</u>		City	:										}	l			'	1
Project Name:	<u>.</u> ·					Stat	e:		Zip:									1				1
Project Location	n:					Pho	ne #:	· .			ا . ا				-		· .					
Sampler Name:	•					Fax					213						:			·		
FOR LAB USE ONLY		٥.		MAT	RIX	- 5	PRESI	ERV.	SAMPLI	NG	8	ł					-					
- 1		(C)OMP.	۵	E ~								ŀ					İ		Ì			
Labin	Sample I.D.	(S)	# CONTAINERS	GROUNDWATER WASTEWATER SOIL			یے انن				I		· .	1								
Lab I.D.	Sample I.D.	B OR	Ϋ́	JND JEW	병	<u>بن</u> ښ	SS SS	æ			17)	ļ ·	İ							
4400084	• •	(G)RAB	Ş	GROI WAS SOIL	OIL	OTHER:	등등	OTHER:	DATE	TIME	ľ	ļ	1									
28	1-5-301	Ğ		0 × 00	. 0	Ĭ			119114	11:45	1			 				† · · ·			<u> </u>	\vdash
29	1-5-30' 1-5-50'	4				丁		T	1	11:55	V			-	1						-	
			L													1						
]								
		_	_										<u> </u>	ļ	·	<u> </u>				<u> </u>	<u> </u>	<u> </u>
		1	╀			4	_ _				ļ			ļ	ļ			<u> </u>			<u> </u>	<u> </u>
		- -	1			\dashv				' :	!		ļ	ļ	ļ	ļ		<u> </u>	ļ	<u> </u>	↓	—
	·	+	-		-	4	-	+	<u> </u>		 	-	ļ <u>.</u>	 	-	├		 		ļ	 	
	· · · · · · · · · · · · · · · · · · ·	-	╂								-	ļ		├	-	├		-	<u> </u>		-	1
DI FACE NOTE: Liability	and Damages, Cardinar's liability and client's exclusive remedy	or aby of	aim arie		in content		15 30 5 2	1	<u> </u>	17 17 18 17		<u></u>	L.			<u> </u>		<u></u>	<u></u>	<u> </u>	Ш	<u> </u>

	services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated rea					<u> </u>	
Relinquished By:	Date: Regelved By:	Phone Result:	□ Yes	□ No	Add'l Phone #:		
	119/19 /10 1	Fax Result:	☐ Yes	□ · No	Add'l Fax #:		
	4: 20 miles survivor	REMARKS:					
Relinquished By:	Date: Received By:	·					
	Time:						
Delivered By: (Circle One)	Sample Condition CHECKED BY:					•	
Sampler - UPS - Bus - Other:	0.20 Tres Cyles No No				·		

[†] Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326