<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Form C-141

Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

			Kele	ease Notific	eation	and Co	rrective A	ction	l							
						OPERA	ΓOR		☐ Initia	al Report	\boxtimes	Final Report				
Name of Co	mpany LC	OGOS Opera	ting, LLC		(Contact Larissa Farrell										
		lace Farming				Telephone N	No. (505)419-11	00								
Facility Nan]	Facility Typ	e: Well									
Surface Ow	ner: Feder	al		Mineral C)wner: F	er: Federal API No. 30-045-27655										
Surface OW	ner. reder	u I	10.7													
						OF REI	LEASE	,								
Unit Letter L	Section 11	Township 31N	Range 9W	Feet from the 1855		South Line outh	Feet from the 1040	East/V	West Line West	County San Juan (County					
		La	titude_3	6.9102554	Longi	tude107	7.7553329	N	AD83							
NATURE OF RELEASE																
Type of Release Gas Volume of Release 150 MCF Volume Recovered 0 Source of Release Flowline Date and Hour of Occurrence Date and Hour of Discovery																
Source of Re	lease Flo	owline				Date and F 5/7/2018	lour of Occurrence	ee	Date and 5/8/2018		covery					
Was Immedia	ate Notice (Given?				If YES, To	Whom?		3/8/2018	10.00 am						
			Yes [No Not Re	equired											
By Whom?						Date and H	lour									
Was a Water	course Read		5			If YES, Vo	olume Impacting t	the Wate	ercourse.							
			Yes 🗵	No												
If a Watercou	urse was Im	pacted, Descri	be Fully.													
									NMOC	D						
										0040						
Describe Cau	ise of Probl	em and Remed	dial Actio	n Taken.*				1	MAT Z Z	2010						
		ell, Replaced f ekfilled and wi		ection. Sampled a area.	rea as pe	r conditions	of approval provi	ded by	he NMOCI	D. All consti	tuents	were under				
Shut in well;	one call and		ine to repl	ten.* ace/repair. Repair After repair, the					pt samples.	See attache	d analy	tical report.				
regulations al public health should their of or the environ	Il operators or the envi- operations h nment. In a	are required to ronment. The have failed to a	report an acceptant dequately CD accept	is true and comp nd/or file certain r te of a C-141 repo investigate and r stance of a C-141	release no ort by the remediate	otifications as NMOCD m contaminati	nd perform correct arked as "Final R on that pose a thr	ctive act eport" of reat to gr	ions for rele loes not rele round water	eases which ieve the open r, surface wa	may er rator of ater, hu	ndanger f liability man health				
Signature:	Lan	inado	ell	2			OIL CON		//	DIVISIO	<u>)N</u>					
Printed Name	e: Larissa F	arrell			4	Approved by	Environmental S	pecialis	t: (SY	~					
		gulatory Tech	nician			Approval Da	te: 6/18/1	8	Expiration	Date:						
E-mail Addre	ess: lfarrell(@logosresourc	esllc.com			Conditions of	f Approval:			Attached						
Date: 5/17/2	018		Phone:	(505) 419-1100												

* Attach Additional Sheets If Necessary

HNCS1813037884



Analytical Report

Report Summary

Client: Logos Operating, LLC Chain Of Custody Number:

Samples Received: 5/11/2018 3:18:00PM

Job Number: 12035-0105 Work Order: P805017

Project Name/Location: Pump Canyon Spill

Assessment & Soil Samples

Report Reviewed By:	Walter Hinkman	Date:	5/15/18	
	Walter Hinchman, Laboratory Director			
		Date:	5/15/18	
	Tim Cain, Project Manager			



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.

Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

Envirotech, Inc, currently holds the appropriate and available Utah TNI certification NM009792018-1 for the data reported.



Project Name:

Pump Canyon Spill Assessment & Soil Samples

PO Box 18

Project Number:

12035-0105

Reported:

Flora Vista NM, 87415

Project Manager:

Felipe Aragon

15-May-18 16:43

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Bottom	P805017-01A	Soil	05/11/18	05/11/18	Glass Jar, 4 oz.
	P805017-01B	Soil	05/11/18	05/11/18	Glass Jar, 4 oz.
Walls	P805017-02A	Soil	05/11/18	05/11/18	Glass Jar, 4 oz.
	P805017-02B	Soil	05/11/18	05/11/18	Glass Jar, 4 oz.



Project Name:

Pump Canyon Spill Assessment & Soil Samples

PO Box 18

Project Number:

12035-0105

Reported: 15-May-18 16:43

Flora Vista NM, 87415

Project Manager: Felipe Aragon

Bottom P805017-01 (Solid)

		Pausu	17-01 (50)	na)					
		Reporting		<u> </u>					
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	100	ug/kg	1	1820003	05/14/18	05/14/18	EPA 8021B	
Toluene	ND	100	ug/kg	1	1820003	05/14/18	05/14/18	EPA 8021B	
Ethylbenzene	ND	100	ug/kg	1	1820003	05/14/18	05/14/18	EPA 8021B	
p,m-Xylene	ND	200	ug/kg	1	1820003	05/14/18	05/14/18	EPA 8021B	
o-Xylene	ND	100	ug/kg	1	1820003	05/14/18	05/14/18	EPA 8021B	
Total Xylenes	ND	100	ug/kg	1	1820003	05/14/18	05/14/18	EPA 8021B	
Total BTEX	ND	100	ug/kg	1	1820003	05/14/18	05/14/18	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		95.2 %	50-1	150	1820003	05/14/18	05/14/18	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1820003	05/14/18	05/14/18	EPA 8015D	
Diesel Range Organics (C10-C28)	48.4	25.0	mg/kg	1	1820001	05/14/18	05/14/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		99.0 %	50-1	150	1820003	05/14/18	05/14/18	EPA 8015D	
Surrogate: n-Nonane		113 %	50-2	200	1820001	05/14/18	05/14/18	EPA 8015D	
Anions by 300.0									
Chloride	ND	20.0	mg/kg	1	1820002	05/14/18	05/14/18	EPA 300.0	



Flora Vista NM, 87415

Project Name:

Pump Canyon Spill Assessment & Soil Samples

PO Box 18

Project Number: Project Manager: 12035-0105 Felipe Aragon Reported: 15-May-18 16:43

Walls
P805017-02 (Solid)

			17-02 (So	lia)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021							VIO-200 III II		
Benzene	ND	100	ug/kg	1	1820003	05/14/18	05/15/18	EPA 8021B	
Toluene	ND	100	ug/kg	1	1820003	05/14/18	05/15/18	EPA 8021B	
Ethylbenzene	ND	100	ug/kg	1	1820003	05/14/18	05/15/18	EPA 8021B	
p,m-Xylene	ND	200	ug/kg	1	1820003	05/14/18	05/15/18	EPA 8021B	
o-Xylene	ND	100	ug/kg	1	1820003	05/14/18	05/15/18	EPA 8021B	
Total Xylenes	ND	100	ug/kg	1	1820003	05/14/18	05/15/18	EPA 8021B	
Total BTEX	ND	100	ug/kg	1	1820003	05/14/18	05/15/18	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		96.0 %	50-	150	1820003	05/14/18	05/15/18	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1820003	05/14/18	05/15/18	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1820001	05/14/18	05/14/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		103 %	50-	150	1820003	05/14/18	05/15/18	EPA 8015D	
Surrogate: n-Nonane		117 %	50-2	200	1820001	05/14/18	05/14/18	EPA 8015D	
Anions by 300.0									
Chloride	ND	20.0	mg/kg	1	1820002	05/14/18	05/14/18	EPA 300.0	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

Page 4 of 10



Project Name:

Pump Canyon Spill Assessment & Soil Samples

PO Box 18

Project Number:

12035-0105

Reported:

Flora Vista NM, 87415

Project Manager:

Felipe Aragon

15-May-18 16:43

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Allalyte	Result	Limit	Units	Level	Result	70KEC	LIIIIIS	KFD	Limit	NOICS
Batch 1820003 - Purge and Trap EPA 5030A										
Blank (1820003-BLK1)				Prepared &	Analyzed:	14-May-1	8			
Benzene	ND	100	ug/kg							
Toluene	ND	100	"							
Ethylbenzene	ND	100	n							
p,m-Xylene	ND	200	"							
o-Xylene	ND	100	"							
Total Xylenes	ND	100								
Total BTEX	ND	100	и							
Surrogate: 4-Bromochlorobenzene-PID	7560		n	8000		94.5	50-150			
LCS (1820003-BS1)				Prepared &	Analyzed:	14-May-1	8			
Benzene	4730	100	ug/kg	5000		94.7	70-130			
Toluene	4660	100	"	5000		93.2	70-130			
Ethylbenzene	4660	100	**	5000		93.3	70-130			
p,m-Xylene	9350	200	11	10000		93.5	70-130			
o-Xylene	4620	100	"	5000		92.5	70-130			
Total Xylenes	14000	100	"	15000		93.2	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7720		"	8000		96.5	50-150			
Matrix Spike (1820003-MS1)	So	ource: P805017-0)1	Prepared &	Analyzed:	14-May-18	8			
Benzene	4620	100	ug/kg	5000	ND	92.4	54.3-133			
Toluene	4530	100	"	5000	ND	90.7	61.4-130			
Ethylbenzene	4550	100	п	5000	ND	91.0	61.4-133			
p,m-Xylene	9110	200	"	10000	ND	91.2	63.3-131			
o-Xylene	4480	100	n	5000	ND	89.7	63.3-131			
Total Xylenes	13600	100	"	15000	ND	90.7	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	7660		"	8000		95.8	50-150			
Matrix Spike Dup (1820003-MSD1)	So	ource: P805017-0)1	Prepared &	Analyzed:	14-May-18	3			
Benzene	4970	100	ug/kg	5000	ND	99.4	54.3-133	7.31	20	
Toluene	4870	100	"	5000	ND	97.5	61.4-130	7.19	20	
Ethylbenzene	4880	100	"	5000	ND	97.6	61.4-133	6.99	20	
p,m-Xylene	9760	200	**	10000	ND	97.7	63.3-131	6.87	20	
o-Xylene	4790	100		5000	ND	95.9	63.3-131	6.65	20	
Total Xylenes	14600	100	н	15000	ND	97.1	63.3-131	6.80	20	
Surrogate: 4-Bromochlorobenzene-PID	7680		"	8000		96.0	50-150			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

envirotech-inc.com



Project Name:

Pump Canyon Spill Assessment & Soil Samples

PO Box 18

Project Number:

12035-0105

Reported: 15-May-18 16:43

Flora Vista NM, 87415

Project Manager:

Felipe Aragon

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1820001 - DRO Extraction EPA 3570										
Blank (1820001-BLK1)				Prepared &	Analyzed:	14-May-18	3			
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Surrogate: n-Nonane	53.8		n	50.0		108	50-200			
LCS (1820001-BS1)				Prepared &	Analyzed:	14-May-18	3			
Diesel Range Organics (C10-C28)	467	25.0	mg/kg	500		93.4	38-132			
Surrogate: n-Nonane	58.5		"	50.0		117	50-200			
Matrix Spike (1820001-MS1)	Sou	rce: P805017-	01	Prepared &	Analyzed:	14-May-18	3			
Diesel Range Organics (C10-C28)	578	25.0	mg/kg	500	48.4	106	38-132			
Surrogate: n-Nonane	57.5		"	50.0		115	50-200			
Matrix Spike Dup (1820001-MSD1)	Sou	rce: P805017-	01	Prepared &	Analyzed:	14-May-18				
Diesel Range Organics (C10-C28)	517	25.0	mg/kg	500	48.4	93.7	38-132	11.1	20	
Surrogate: n-Nonane	57.3		"	50.0		115	50-200			



Project Name:

Pump Canyon Spill Assessment & Soil Samples

PO Box 18

Flora Vista NM, 87415

Project Number:

12035-0105

Project Manager:

Felipe Aragon

Reported: 15-May-18 16:43

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1820003 - Purge and Trap EPA 5030A										
Blank (1820003-BLK1)				Prepared &	Analyzed:	14-May-18				
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.01		"	8.00		100	50-150			
LCS (1820003-BS2)				Prepared &	Analyzed:	14-May-18	1			
Gasoline Range Organics (C6-C10)	42.1	20.0	mg/kg	50.0		84.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.30		"	8.00		104	50-150			
Matrix Spike (1820003-MS2)	Sour	rce: P805017-	01	Prepared &	Analyzed:	14-May-18				
Gasoline Range Organics (C6-C10)	44.3	20.0	mg/kg	50.0	ND	88.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.26		"	8.00		103	50-150			
Matrix Spike Dup (1820003-MSD2)	Sour	rce: P805017-	01	Prepared: 1	4-May-18	Analyzed:	15-May-18			
Gasoline Range Organics (C6-C10)	48.0	20.0	mg/kg	50.0	ND	96.0	70-130	8.06	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.21		"	8.00		103	50-150			



Project Name:

Pump Canyon Spill Assessment & Soil Samples

PO Box 18

Project Number:

12035-0105

Reported:

Flora Vista NM, 87415

Project Manager:

Felipe Aragon

15-May-18 16:43

Anions by 300.0 - Quality Control

Envirotech Analytical Laboratory

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1820002 - Anion Extraction EPA 300	0.0/9056A									
Blank (1820002-BLK1)				Prepared &	Analyzed:	14-May-18	3			
Chloride	ND	20.0	mg/kg							
LCS (1820002-BS1)				Prepared &	Analyzed:	14-May-18	1			
Chloride	254	20.0	mg/kg	250		102	90-110			
Matrix Spike (1820002-MS1)	Sour	ce: P805017-	01	Prepared &	Analyzed:	14-May-18				
Chloride	257	20.0	mg/kg	250	ND	103	80-120			
Matrix Spike Dup (1820002-MSD1)	Sour	ce: P805017-	01	Prepared &	Analyzed:	14-May-18				
Chloride	260	20.0	mg/kg	250	ND	104	80-120	1.06	20	



Project Name:

Pump Canyon Spill Assessment & Soil Samples

PO Box 18

Project Number:

12035-0105

Reported: 15-May-18 16:43

Flora Vista NM, 87415

Project Manager:

Felipe Aragon

Notes and Definitions

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

RPD

Relative Percent Difference

**

Methods marked with ** are non-accredited methods.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

Page 9 of 10

Project Information	Chain of Cus	stody								P	agel	of	
Client: Log as oferating Project: fung anyon still assessment + Project Manager: F. Aragon	Report Attention		No.		La	b Use	Only		TAT	E	EPA Program		
Project: Pump Canyon Still assessment +	Report due by:		Lab	WO	Ħ	J	ob Nui	mber	1D 3D	RCRA	CWA	SDWA	
Project Manager: F.Aragon	Email: igarcua e anmotect	-una		05		7	1203	-0105	X				
Address:	Address:		•		<u>y</u> 1		-	and Meth			Sta	ate	
City, State, Zip	City, State, Zip										NM CO	UT AZ	
Phone:	Phone:		380										
Email: Gcrabtree Admin Bhall Faragon			DRO/GRO		68	12					×		
Time Date Matrix No Containers Sample ID		Lab Number	8015 D	8260	GPA 2189	389	5				Ren	narks	
907 511/18 5 2 Bottom		1	X			()	X				1-402 Cp	jar	
907 5/1/18 5 2 Bottom 911 5/11/18 5 7 Walls		2,	X			X							
5/11/19			X			X	X						
3n 5/4/18 5 1			X			X.	X						
		-											
Additional Instructions: Vis. ice in cooler -	÷ W ₎	Lorenzana		-				-	anne de la companya della companya della companya de la companya della companya d				
I, (field sampler), attest to the validity and authenticity of this sample. I am aw considered fraud and may be grounds for legal action. Sampled by:	are that tampering with or intentionally mislabelling the si	ample location, d	late or	time of	collec	tion is I				t be received on i		10 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Relinquished by: (Signature) Buttu Kau Date Time [1] 19 151	Received by: (Signature)	Date 05/11/1	·	Time	1:18		Receive	ed on ice	Lab (Jse Only			
Relinquished by: (Signature) Date Time	Received by: (Signature)	Date	0	Time	-		T1 AVG Te	mp °C	e: (Ý) 4.0		<u>T3</u>		
Imple Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Othe	r	Containe	r Tvr	e: g ·	- glas					ass, v - VOA	A		
ote: Samples are discarded 30 days after results are reported unles	ss other arrangements are made. Hazardous samp	oles will be retu	irned t	to clier	nt or c	disposed	of at the					e above	
envirotech	COCHE History of L. Exprincton W.	11 67 401				Dh (f)	0(1/22 0/15	F=15051(2)	10/5			and write has	



