State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Inct NVF 1903832832

T			OWN		TO	4
Res	nn	ne	ıhl	A	\mathbf{P}_{i}	a mit
TECD	Pυ	IIO.	IVI		1 6	alty

Responsible	Party	Harvest Four C	orners, LLC		OGRID	33388	
Contact Nan	ne	Kijun Hong			Contact T	elephone	(505) 632-4475
Contact ema	il	khong@harvest	midstream.com		Incident #	(assigned by OCD)	
Contact mail	ling address	1755 Arroyo Di	., Farmington, NM	874	13		
Latitude		36.97443	Location o		Longitude	-10	<u>)8.10724</u>
Site Name	Culpepper	Martin SRC 1B			Site Type	Meter Run	
Date Release	Discovered	1/10/2019			API# (if ap)	olicable)	-
Unit Letter	Section 21	Township 232N	Range 12W		Cour San J		
Crude Oil	Materia	l(s) Released (Select al	Nature and			justification for the v	rolumes provided below)
		Volume Release				Volume Recov	ered (bbls)
Produced	Water	Volume Release	,				ered (bbls) 0.48
		Is the concentrat	ion of dissolved chlors >10.000 mg/l?	oride	in the	☐ Yes ⊠ No	
Condensa	te	Volume Release				Volume Recove	ered (bbls)
Natural G	as	Volume Release	d (Mcf) 105.5			Volume Recove	ered (Mcf) 0
Other (des	scribe)	Volume/Weight	Released (provide u	nits)		Volume/Weigh	t Recovered (provide units)
Cause of Rele	ease						
Check valve	on the mete	er run failed due t	o freeze.			N	MOCD
						FEB	0 7 2019

DISTRICT III

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does t	he responsible p	arty consider this a major release?
release as defined by			
19.15.29.7(A) NMAC?			
☐ Yes ⊠ No			
2.			
If YES, was immediate no	otice given to the OCD? By whom	2 To whom? W	hen and by what means (phone, email, etc)?
,	whom	. 10 whom: v	vicin and by what means (phone, email, etc)?
	Ini	tial Respon	se
The responsible p	party must undertake the following actions i	mmediately unless t	hey could create a safety hazard that would result in injury
The source of the rele	**		
The impacted area has	s been secured to protect human he	alth and the env	ironment.
Released materials have	ve been contained via the use of be	erms or dikes, ab	sorbent pads, or other containment devices.
	coverable materials have been rem		
	above have <u>not</u> been undertaken,		
		onplain wily.	
D 10 15 20 0 D (4) 3 B (4)	104		
has begun please attach a	AC the responsible party may compare the order of actions to date. If re	mence remediati	on immediately after discovery of a release. If remediation
within a lined containment	area (see 19.15.29.11(A)(5)(a) NM	MAC), please att	ave been successfully completed or if the release occurred ach all information needed for closure evaluation.
and the state of t			y knowledge and understand that pursuant to OCD rules and
regulations an operators are re	equired to report and/or file certain rele	ease notifications	and perform corrective actions for releases which may and answer
public health of the environme	ent. The acceptance of a C-141 report	by the OCD does	not relieve the operator of liability should their operations have
addition, OCD acceptance of	a C-141 report does not relieve the ope	erator of responsib	ndwater, surface water, human health or the environment. In illity for compliance with any other federal, state, or local laws
and/or regulations.	•	1	y and the state, of local laws
Printed Name: Kijur	1 Hong	Title:	Environmental Specialist
	11 12		
Signature:	10 H	Date:	1/28/2019
email: khong@harves	tmidstream.com	Telephone:	505-436-8457
			<u> </u>
OCD Only			
1	sex Fields		71717010
Received by:	SSE TICICIO	Date: _	411019

State of New Mexico Energy Minerals and Natural Resources

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

MAY 2 9 2018 Revised August 8, 2011

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

Release Notification and Corrective Action

21 66						OPERA			Initi	al Report	\bowtie	Final Repor		
Name of Co	ompany: W	illiams Fou	r Corne	rs LLC		Contact: Ki								
Address: 17 Facility Nar	55 Arroyo	Dr., Farm	ington, N	M 874	13	Telephone 1	No.: (505) 632-	4475						
		ur oa wei	Locatio	n		Facility Typ	e: Meter Hous	se						
Surface Ow	ner: BLM				Mineral Own	ner			BLM Project No.					
					LOCATIO	ON OF RE	LEASE							
Unit Letter	Section	Township	Range	Feet f		th/South Line	Feet from the	East/W	est Line	County				
I	14	31N	9W							San Juan				
				La	titude <u>36.894</u>	91 Longitude	e <u>-107.74394</u>							
m					NATURI	E OF REL								
Type of Relea	ase: Natural	Gas				Volume of				Recovered:				
							Natural Gas d on 5/14/2018)		0 MCF N	atural Gas				
						(calculate)	1011 3/14/2016)							
Causes of D-1	T 11	0 10				No Liquid	S							
Source of Rel	lease: Lubin	g from orific	ce fitting s	heared	off.		lour of Occurrence		Date and	Hour of Disc	overy:			
						5/11/2018	@ 2:30 PM		5/11/2018	3 @ 2:30 PM				
Was Immedia	te Notice Gi					If YES, To	Whom? NA							
			Yes	No 🗵	Not Required	i								
By Whom?	NA					Date and H	our: NA					,		
Was a Waterc	ourse Reach	ed?			-	If YES, Vo	lume Impacting t	the Water	course	NA				
			Yes 🛛	No					ourse.	112				
If a Watercour	rse was Impa	acted, Descri	be Fully.*	NA										
Describe Caus	se of Problem	n and Remed	ial Action	Taken :	k									
Due to high w	vinds, the m	eter house a	t the well	location	was blown ov	er causing the	tubing from the	e orifice f	litting tah	to shear of	ralogei	ng notural		
gas to the ath	nosphere. U	pon discove	ry, the lin	e was s	hut in and put	out of service.	tusing it out the	ormee 1	itting tab	to shear or	cicasi	ng naturai		
Describe Area There was no	Affected an	d Cleanup A	ction Take	en.*										
I hereby certif	y that the inf	formation giv	en above	is true a	nd complete to	the best of my	knowledge and u	nderstand	that pursi	uant to NMO	CD ru	les and		
regulations an	operators ar	e required to	report and	lor file	certain release	notifications an	d perform correc	tive action	ne for rala	acac which a	2011 000	Jamasa		
should their or	perations hav	e failed to ac	deceptance decuately i	investig	141 report by thate and remedia	te contamination	arked as "Final Re on that pose a three	eport" doe	es not relie	eve the opera	tor of l	iability		
of the chylloll	ment. In add	illion, NIMO	D accepta	ance of	a C-141 report	does not relieve	the operator of r	esponsibi	ility for co	mpliance water	r, num	other		
federal, state,	or local laws	and/or regul	ations.											
	11	1/2	\				OIL CONS	SERVA	TION	DIVISIO	1			
	KY	A				Approved by I	Environmental Sr	andalist.						
Signature:	, 0		1			Approved by I	Ziiviioimientai S	becianst:	1					
Printed Name:	Kiiun Hone	σ						2	V-					
							- (1)	on		-9				
Title: Environ	imental Spec	cialist				Approval Date	7/3/18	Ex	piration D	Date:				
E-mail Addres	s: kijun.hon	g@williams	.com			Conditions of	Approval·							
						Conditions of	approval.		Attached					
Date: 5/23/201		Phon	e: (505) 6.	32-4475										
Attach Additi	onai Sneets	II Necessai	ry			M	1817V	91	1112	90				
						, 4	11 101	Up	CIF	VC				

NMOCD

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

APR 1 6 2018

Form C-141 Revised August 8, 2011

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

Release Notification and Corrective Action

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

						OPERA'	ГOR			al Report		Final Report
		illiams Fou				Contact: Ki	jun Hong					P
		Dr., Farmi	ngton, N	NM 87413		Telephone 1	No.: (505) 632-	4475				
Facility Na	me: Trunk	C				Facility Typ	e: Pipeline					
Surface Ow	ner: Privat	te		Mine	eral Owne	er			BLM P	roject No.		
				LO	CATIO	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from th		n/South Line	Feet from the	East/	West Line	County		
G	9	31N	13W							San Juan		
				Latitud	e <u>36.9160</u>	0 Longitude	<u>-108.20660</u>					
T		-		NA	ATURE	OF RELI						
Type of Rele	ase: Natural	Gas				Volume of			A STATE OF THE PARTY OF THE PAR	Recovered:		
							CF Natural Gas amount of liqui		0 MCF	woude of to-		
						CIRIOWII	amount of nqui	us	removed	yards of imp	acted	SOII
Source of Re	lease: Dama	ged pipeline	due to lir	ie strike			our of Occurren	ce:		Hour of Disc		:
						3/31/2018	@ 6:00 PM		3/31/2018	8 @ 6:00 PM		
Was Immedia	ate Notice G					If YES, To	Whom? Vanes	sa Field	s and Cory	Smith		
			Yes _	No Not	Required							
By Whom?	Kijun Hong					Date and H	our: 4/2/2015 @	9:26 A	M			
Was a Watero	course Reach					If YES, Vo	lume Impacting	the Wat	ercourse.	NA		-
			Yes 🛚	No								
If a Watercou	rse was Imp	acted, Describ	e Fully.*	NA								
Describe Cau	se of Proble	m and Remed	ial Action	Taken.* A fa	rmer was	cleaning out	his ditch and re	placing	his water l	ine when he	struc	k our
pipeline with	a backhoe.	Pipeline wa	s isolated	, shut in, and	repaired.							
D11 A	A CC . 1	1.01										
Describe Area	a Affected ar	nd Cleanup A	ction Tak	en.* Juring cleanu	Confin	mation compl	es were collecte	1 4/2	/2010			
I hereby certif	fy that the in	formation giv	en above	is true and cor	nplete to the	he best of my	knowledge and u	ınderstaı	nd that purs	uant to NMO	CD rt	iles and
regulations al	l operators as	re required to	report an	d/or file certain	n release n	otifications an	d perform corre	ctive act	ions for rele	ases which m	iay en	danger
should their o	perations have	ve failed to ad	leguately	investigate and	d remediate	e NMOCD ma	arked as "Final R on that pose a thr	eport" d	loes not relie	eve the operat	tor of	liability
or the environ	ment. In ad	dition, NMOC	D accept	ance of a C-14	11 report d	oes not relieve	the operator of	responsi	ibility for co	mpliance water	th any	other
federal, state,	or local laws	s and/or regul	ations.									
	11	1/2)				OIL CON	SERV	ATION	DIVISION	1	
	KT	At 1				Approved by I	Environmental S	necialis				
Signature:	. 0	0				rippiroved by I	Silviroralicitar S	peciansi	1			
Printed Name	: Kijun Hon	g					12					
Title: Environ	nmental Spe	ecialist				Approval Date	4/27/18		Expiration I)ate:		
E-mail Addres							4 31 4		Empiration I			
L-man Addres	os. Kijun.nol	ig@williams.	.com		- (Conditions of	Approval:			Attached		
Date: 4/10/20		Phon	e: (505) 6	32-4475			U					W
Attach Additi	ional Sheets	s If Necessar	TV				-	_		1		

Sample Area 30151 8021 NVF 1810231591

Fields, Vanessa, EMNRD

From:

Hong, Kijun < Kijun. Hong@williams.com>

Sent:

Monday, April 2, 2018 9:26 AM

To:

Fields, Vanessa, EMNRD; Smith, Cory, EMNRD

Cc:

Webre, Matt

Subject:

Williams - Trunk C Line Strike

Vanessa and Cory,

On March 31, 2018 at 6pm, there was a line strike to the Williams – Trunk C pipeline by a farmer operating a backhoe.

The line strike occurred at GPS location 36.916, -108.2066. The severity of the release and potential risk to public safety was not relayed to the EHS group due to miscommunication.

We have a crew working on the initial cleanup and should have further information shortly. Please let us know if there is anything else we can provide in the meantime.

Thank You, Kijun



Kijun Hong | Williams | Environmental Specialist | West – Four Corners Area Office: 505-632-4475 | Cell: 505-436-8457 | 1755 Arroyo Dr., Bloomfield, NM 87413











State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

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

			Kele	ease Notific	eation	i and Co	orrective A	ction	l				
						OPERA	ГOR			al Report	\bowtie	Final Repor	
Name of Co	ompany: W	illiams Fou	r Corner	's LLC		Contact: Ki							
Address: 17	755 Arroyo	Dr., Farm	ington, N	M 87413			No.: (505) 632-4						
Facility Na	me: Owens	2 Drip]	Facility Type: Drip Location							
Surface Ow	vner: BLM			Mineral	Owner	r			BLM P	roject No.			
				LOCA	TION	OF RE	LEASE						
Unit Letter	Section 19	Township 31N	Range 12W	Feet from the	North/	South Line	Feet from the	East/\	West Line	County San Juan			
				Latitude	36.8899	Longitude	-108.1386						
				NAT	URE	OF REL	EASE						
Type of Rele	ease: Pipeline	Liquids				Volume of				Recovered:			
						20 yards o	f impacted soil		20 yards	of impacted	soil re	moved	
Source of Rerust.	elease: Above	e ground dri	p tank tha	t had a leak due	to		Iour of Occurrence 10:45 AM	e:		Hour of Disc @ 10:45 AN			
						Impacted 3/9/2018	dirt hauled on		.e tehne	NM	OCD		
Was Immedi	ate Notice G		Yes	No Not Re	quired	If YES, To	Whom? NA			APR :	26 2	018	
By Whom?	NA					Date and H	lour: NA			DISTRI	CT	111	
Was a Water	course Reach	ned?	Yes 🛛	No		If YES, Vo	lume Impacting t	the Wate	ercourse.	NA NA	UI		
If a Waterco	urse was Imp	acted, Descri	ibe Fully.*	NA									
Describe Car	use of Proble	m and Remed	dial Action	Taken.* Above	ground	drip tank th	at had a leak du	e to rus	t. Tank ha	as been repla	aced.		
	ea Affected a			en.* filled with clean	dirt. C	onfirmation	samples came b	ack all "	'non-detec	t. Please see	e result	s attached.	
regulations a public health should their or the enviro	all operators and or the environmental or the environmental operations has	re required to onment. The we failed to a dition, NMO	report an acceptance dequately CD accept	is true and compl d/or file certain re e of a C-141 repo investigate and re ance of a C-141 r	elease no rt by the emediate	otifications as NMOCD m contaminati	nd perform correct arked as "Final R on that pose a three the operator of	etive acti eport" d eat to gr responsi	ions for rele oes not reli ound water bility for co	eases which notes the operation of the compliance was compliance with the compliance w	may end ator of l ter, hum ith any	danger liability nan health	
Signature:	18	- A				Approved by	OIL CON			DIVISIO	N		
Printed Nam	e: Kijun Hoi	ng					()			9	_		
Title: Enviro	onmental Sp	ecialist			I	Approval Dat	20 :10	1	Expiration l	Date:			
E-mail Addre	ess: kijun.ho	ng@william	s.com			Conditions of	Approval:			Attached			
Date: 4/23/20	018	Pho	ne: (505)	532-4475			4	-					

* Attach Additional Sheets If Necessary

NVF1815131868

Fields, Vanessa, EMNRD

From:

Hong, Kijun < Kijun. Hong@williams.com >

Sent:

Monday, April 23, 2018 10:20 AM

To:

Fields, Vanessa, EMNRD

Cc:

Smith, Cory, EMNRD

Subject:

RE: Phone discussion of non-reported release

Attachments:

C-141 Owens 2 Drip - INITIAL-FINAL 4-23-18.pdf

Please find attached the Initial-Final C-141 for the release from our Drip tank at the Owens 2 location.

Please let me now if there is anything else we can provide regarding this incident.

Thank You!!

Kijun

From: Hong, Kijun

Sent: Thursday, April 12, 2018 7:08 PM

To: 'Fields, Vanessa, EMNRD' <Vanessa.Fields@state.nm.us>

Cc: Smith, Cory, EMNRD <Cory.Smith@state.nm.us> **Subject:** RE: Phone discussion of non-reported release

Hi Vanessa,

I apologize for the delay. I am still waiting for the Sampling Form we usually get from the COMs group.

Williams had a leak from an above ground tank at our Owens 2 Drip location (36.8899, -108.1386) on 3/2/2018.

20 Yards of impacted soil was removed on 3/9 but never reported to our environmental group. Because of this breakdown in communication, the OCD was not given notification of sampling and a C-141 was not submitted. I have attached the sample results.

We have talked to our maintenance group to make sure yardages are reported and I have gotten with IEI who now sends me daily tickets showing what we have delivered to them.

Other than the C-141, please let us know what we need to do to close out this release.

Thank You,

Kijun

From: Fields, Vanessa, EMNRD [mailto:Vanessa.Fields@state.nm.us]

Sent: Thursday, April 12, 2018 8:31 AM **To:** Hong, Kijun < <u>Kijun.Hong@williams.com</u>>

Cc: Smith, Cory, EMNRD < Cory. Smith@state.nm.us>

Subject: [EXTERNAL] Phone discussion of non-reported release

Good morning Kijun,



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

March 21, 2018

Lloyd Bell Williams Field Services 1755 Arroyo Dr., Bloomfield, NM 87413 TEL: (505) 632-4442

FAX

RE: Owen 20

OrderNo.: 1803594

Dear Lloyd Bell:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/10/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1803594

Date Reported: 3/21/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Owen 20

Lab ID: 1803594-001

Client Sample ID: Bottom

Collection Date: 3/9/2018 1:30:00 PM

Received Date: 3/10/2018 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	3/20/2018 9:07:44 PM	37137
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	3/13/2018 9:21:48 PM	36968
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	3/13/2018 9:21:48 PM	36968
Surr: DNOP	94.4	70-130	%Rec	1	3/13/2018 9:21:48 PM	36968
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	3/13/2018 6:38:46 PM	36964
Surr: BFB	98.9	15-316	%Rec	1	3/13/2018 6:38:46 PM	36964
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Methyl tert-butyl ether (MTBE)	ND	0.094	mg/Kg	1	3/13/2018 6:38:46 PM	36964
Benzene	ND	0.023	mg/Kg	1	3/13/2018 6:38:46 PM	36964
Toluene	ND	0.047	mg/Kg	1	3/13/2018 6:38:46 PM	36964
Ethylbenzene	ND	0.047	mg/Kg	1	3/13/2018 6:38:46 PM	36964
Xylenes, Total	ND	0.094	mg/Kg	1	3/13/2018 6:38:46 PM	36964
Surr: 4-Bromofluorobenzene	90.7	80-120	%Rec	1	3/13/2018 6:38:46 PM	36964

Matrix: SOIL

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

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
- PQL Practical Quanitative Limit
- 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 Page 1 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1803594

Date Reported: 3/21/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Client Sample ID: Wall

Project: Owen 20 Collection Date: 3/9/2018 1:30:00 PM

Lab ID: 1803594-002

Matrix: SOIL

Received Date: 3/10/2018 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	3/20/2018 9:20:09 PM	37137
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst:	TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	3/13/2018 9:43:52 PM	36968
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/13/2018 9:43:52 PM	36968
Surr: DNOP	94.0	70-130	%Rec	1	3/13/2018 9:43:52 PM	36968
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	3/13/2018 7:02:16 PM	36964
Surr: BFB	95.4	15-316	%Rec	1	3/13/2018 7:02:16 PM	36964
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Methyl tert-butyl ether (MTBE)	ND	0.095	mg/Kg	1	3/13/2018 7:02:16 PM	36964
Benzene	ND	0.024	mg/Kg	1	3/13/2018 7:02:16 PM	36964
Toluene	ND	0.047	mg/Kg	1	3/13/2018 7:02:16 PM	36964
Ethylbenzene	ND	0.047	mg/Kg	1	3/13/2018 7:02:16 PM	36964
Xylenes, Total	ND	0.095	mg/Kg	1	3/13/2018 7:02:16 PM	36964
Surr: 4-Bromofluorobenzene	89.9	80-120	%Rec	1	3/13/2018 7:02:16 PM	36964

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

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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 6 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1803594

21-Mar-18

Client:

Williams Field Services

Project:

Owen 20

Sample ID MB-37137

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Batch ID: 37137

RunNo: 49932

Prep Date: 3/20/2018 Analysis Date: 3/20/2018 Result

SeqNo: 1617510

SPK value SPK Ref Val %REC LowLimit

Units: mg/Kg HighLimit

%RPD **RPDLimit**

Qual

Analyte Chloride

PQL ND

1.5 SampType: Ics

TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 37137

RunNo: 49932

Prep Date: 3/20/2018

Sample ID LCS-37137

Analysis Date: 3/20/2018

SeqNo: 1617511

Units: mg/Kg

Result PQL SPK value SPK Ref Val %REC HighLimit

RPDLimit Qual

Analyte

110

%RPD

Chloride

14

90

1.5 15.00 92.5

Qualifiers:

H

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit POL Practical Quanitative Limit
 - % Recovery outside of range due to dilution or matrix
- В 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
- Sample container temperature is out of limit as specified

Page 3 of 6

Hall Environmental Analysis Laboratory, Inc.

9.3

WO#:

1803594

21-Mar-18

Client:

Williams Field Services

Project:

Surr: DNOP

Owen 20

- Owen 2	0									
Sample ID LCS-36968	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch	ID: 36	968	F	RunNo: 49732					
Prep Date: 3/12/2018	Analysis D	ate: 3/	3/13/2018 SeqNo: 1609428 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	86.8	70	130			
Surr: DNOP	3.8		5.000		76.0	70	130			
Sample ID MB-36968	SampT	уре: МЕ	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch	ID: 36	968	F	RunNo: 4	9732				
Prep Date: 3/12/2018	Analysis D	ate: 3/	13/2018	5	SeqNo: 1	609429	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								

93.4

70

130

10.00

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
- PQL Practical Quanitative Limit
- 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

Page 4 of 6

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1803594

21-Mar-18

Client:

Williams Field Services

Project:

Owen 20

Sample ID MB-36964	SampType: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID: PBS	Batch ID: 36	Batch ID: 36964			RunNo: 49750				
Prep Date: 3/12/2018	Analysis Date: 3/	rsis Date: 3/13/2018 SeqNo: 1609795				Units: mg/k	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5.0								
Surr: BFB	930	1000		92.8	15	316			
Sample ID LCS-36964	SampType: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch ID: 369	964	F	RunNo: 4	9750				
Prep Date: 3/12/2018	Analysis Date: 3/	13/2018	S	SeqNo: 10	609796	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26 5.0	25.00	0	105	75.9	131			
Surr: BFB	1000	1000		104	15	316			

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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits

Page 5 of 6

- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1803594

21-Mar-18

Client:

Williams Field Services

Project:

Owen 20

Sample ID MB-36964	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batch	n ID: 36	964	F	RunNo: 4	9750				
Prep Date: 3/12/2018	Analysis D	oate: 3/	13/2018	5	SeqNo: 1	609836	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		89.8	80	120			

Sample ID LCS-36964	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	n ID: 36	964	F	RunNo: 4	9750				
Prep Date: 3/12/2018	Analysis D	ate: 3/	13/2018	8	SeqNo: 1	609837	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.0	0.10	1.000	0	103	70.1	121			
Benzene	1.0	0.025	1.000	0	105	77.3	128			
Toluene	1.0	0.050	1.000	0	104	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	103	80.7	127			
Xylenes, Total	3.1	0.10	3.000	0	105	81.6	129			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.3	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
- PQL Practical Quanitative Limit
- 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

Page 6 of 6

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analyzis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	WILLIAMS FIELD SERVI	Work Order Numb	er: 180	3594		RcptNo	1
Received By:	Isaiah Ortiz	3/10/2018 8:00:00 /	M		ION	ingree.	
Completed By	Isaiah Ortiz	3/12/2018 9:16:45 A	M		ICA		
Reviewed By	8Re 03/12/18		1a	beled	b4:	A	
Chain of Cus	tody					0	
1. Is Chain of Co	ustody complete?		Yes	V	No 🗌	Not Present	
2. How was the	sample delivered?		Соц	rier			
Log In 3. Was an attern	pt made to cool the samples?		Yes	V	No 🗀	NA 🗆	
4. Were all samp	les received at a temperature of	of >0° C to 6.0°C	Yes	V	No 🗌	NA 🗆	
5. Sample(s) in p	proper container(s)?		Yes	V	No 🗌		
6. Sufficient sam	ple volume for indicated test(s)	7	Yes	¥	No 🗌		
7. Are samples (e	except VOA and ONG) properly	preserved?	Yes	V	No 🗌		
8. Was preservat	ive added to bottles?		Yes		No 🗹	NA 🗆	
9. VOA vials have	e zero headspace?		Yes		No 🗌	No VOA Vials	
10. Were any sam	ple containers received broken	?	Yes		No 🗸	# of preserved	and the state of t
	rk match bottle labels? ncies on chain of custody)		Yes	V	No 🗆	bottles checked for pH:	>12 unless noted)
	orrectly identified on Chain of C	ustodv?	Yes	V	No 🗌	Adjusted?	- 12 dimoss rivied)
	analyses were requested?			₹	No 🗌		
	g times able to be met? stomer for authorization.)		Yes	V	No 🗆	Checked by:	
Special Handli	ng (if applicable)						
15, Was client not	ified of all discrepancies with th	is order?	Yes	none	No 🗌	NA 🗹	
Person N By Whon Regardin Client Ins	n:	Date: \(\sum \)	_ eMa	il Pho	ne 🗌 Fax	☐ In Person	
16. Additional rem	narks:	I Intact Seal No	Seal Da	ite Si	gned By		

	3-9-/8 3:30 _p								3-4-18 1:30/19	3-9-18 1:30/2 50:1	Date Time	□ EDD (Type)	O NELAP	Accreditation	□ Standard	email or Fax#:	Phone #:	1755	Mailing Address:		Client	Cha
2	Reinquished by								14 Soil	11.05 41	ne Matrix	e)	□ Other		ge:	# 71011			ess:		W FS	in-of-Ci
1804 Jant Wart	Reinquished by:								WALL	BOTTOM			er		□ Level 4 (Full Validation)	17381 116		ARROYA Dr.				Chain-of-Custody Record
170	Received by:								1-402	1-407	Container Type and #	Sample Temperature:		Sampler >	110>	Project Manager:		Project #:	MO	Project Name	E Standard	Turn-Around Time:
7	hu								7007	2007	Preservative Type	perature:	D.Yes	ce y z	0	ager			14	O	Rush	Time:
3/10/18 80	3/9//8 1/53/								-000	-81	HEAL No.	0.4	E-No	in all	BELL				1-20			
<u> </u>	70 eg			+	+	1	\vdash		×	×	BTEX + MT	BE	+ TN	MB'	s (802	1)		Г				
	marks:										ВТЕХ + МТ	_			_	OUT OF TAXABLE PARTY.		T	49			
					201				×	×	TPH 8015B	(GI	RO /	DF	RO/M	RO)		Tel. 505-345-3975	4901 Hawkins NE -			
						- Linia					TPH (Metho	od 4	18.1)				5-34	awki		> -	
			-	+	_	+	_				EDB (Meth	_		-				5-39	ns N	WWW	2	
			+	+	+	+	-				PAH's (831		-	0.5	SIMS)		An		. 7	www.hallenvironmental.com	NALYSIS	-
			+		-	+	-			10.75	Anions (F,C			^	DO S	0.1	alys	Fa	Albud	invirc	S	
		\vdash	+			+	-		-		8081 Pestio						is Re	× 50	nem	omme.	S	
				+	+	+					8260B (VO		7 00	102	FUD	•	Analysis Request	5-34	que, l	ntal.	53	į
											8270 (Semi	-	A)				st	Fax 505-345-4107	MM 8	MOC	BC	
									×	×	CHLO	_	_	=			1016	37	Albuquerque, NM 87109		Ž 3	
					-											- 1					YSIS LABORATORY	
											Air Dubbles	W.									RY	

Air Bubbles (Y or N)

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

Chain-of-Custody Record

Turn-Around Time:

State of New Mexico Energy Minerals and Natural Resources

NMOCD

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in AAY 2 9 2 accordance with 19.15.29 NMAC.

Release Notification and Corrective Action **OPERATOR** Initial Report Final Report Name of Company: Williams Four Corners LLC Contact: Kijun Hong Address: 1755 Arroyo Dr., Farmington, NM 87413 Telephone No.: (505) 632-4475 Facility Name: Florence 44 Pipeline Facility Type: Pipeline Surface Owner: BLM Mineral Owner BLM Project No. LOCATION OF RELEASE Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County 30 30N 8W San Juan Latitude 36.782222 Longitude -107.706389 NATURE OF RELEASE Type of Release: Natural Gas and Pipeline Liquids Volume of Release: Volume Recovered: 107.9 MCF Natural Gas **0 MCF Natural Gas** determined on 5/10/2018 70 yards of impacted soil removed on 70 yards of impacted soil 5/21/2018 removed on 5/21/2018 Source of Release: Leak in pipeline Date and Hour of Occurrence: Date and Hour of Discovery: 4/20/2018 @ 2:14 PM 4/20/2018 @ 2:14 PM Was Immediate Notice Given? If YES, To Whom? Vanessa Fields By Whom? Kijun Hong Date and Hour: Immediate notice was given on 5/21/2018 @ 8:39 AM when it was anticipated that more than 50 yards of impacted soil will be Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. NA ☐ Yes ☒ No If a Watercourse was Impacted, Describe Fully.* NA Describe Cause of Problem and Remedial Action Taken.* Release caused by failure of the pipeline due to external corrosion. During the replacement of bad pipe, impacts were encountered. Describe Area Affected and Cleanup Action Taken.* All impacted soil has been removed and backfilled with clean dirt. Confirmation samples have been collected and are being analyzed/processed. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. **OIL CONSERVATION DIVISION** Approved by Environmental Specialis Signature: Printed Name: Kijun Hong Title: Environmental Specialist Approval Date: **Expiration Date:** E-mail Address: kijun.hong@williams.com Conditions of Approval:

Phone: (505) 632-4475

Date: 5/23/2018

NVF 1815134 159

Attached

6

^{*} Attach Additional Sheets If Necessary

Brandon Powell

Office: (505) 334-6178 ext. 116

"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Webre, Matt < Matt. Webre@Williams.com>

Sent: Wednesday, May 23, 2018 10:26 AM

To: Powell, Brandon, EMNRD < Brandon. Powell@state.nm.us>

Cc: Hong, Kijun <Kijun.Hong@williams.com>; Perrin, Charlie, EMNRD <charlie.perrin@state.nm.us>

Subject: FW: C-141 Florence 44 - INITIAL 5-23-18

Brandon,

I would appreciate you clarifying the volume triggers below. What Kijun stated below is what I clearly remember you communicating to Williams. Williams has been more than willing to follow OCD guidance on reporting releases based on volumes regardless of the fact that it is not codified in any regulation or guidelines. Vanessa referenced "this was initially discussed in meeting with Williams in March of 2017." The OCD needs to understand that uncodified guidance makes it hard for regulated companies to maintain compliance as different people may have different recollection of conversations, expectations, and/or interpretations.

Additionally, if the new spill rule is passed in its current draft, there is no language regarding reporting releases based on volumes. Would it be your intent to continue requiring notifications for the 12 and 50 cubic yard triggers?



Matt Webre, PG | Williams | Supervisor EH&S | West Safety and Environmental Office: 505-632-4442 | Cell: 505-215-8059 | 1755 Arroyo Drive, Bloomfield, NM 87413

Join Our Talent Network f L in & OPPEUP

If you have received this message in error, please reply to advise the sender of the error and then immediately delete this message.

From: Hong, Kijun

Sent: Wednesday, May 23, 2018 9:23 AM

To: Fields, Vanessa, EMNRD < Vanessa. Fields@state.nm.us >; Smith, Cory, EMNRD < Cory. Smith@state.nm.us >;

l1thomas@blm.gov

Cc: Ruybalid, Tristen < Tristen.Ruybalid@Williams.com >; Webre, Matt < Matt.Webre@Williams.com >; Powell, Brandon,

EMNRD < Brandon. Powell@state.nm.us>

Subject: RE: C-141 Florence 44 - INITIAL 5-23-18

It was my understanding that 12 yards triggers the 15 day written notification (C-141) and 50 yards triggers immediate verbal notification (phone call).

Are we mistaken in this?

From: Fields, Vanessa, EMNRD [mailto:Vanessa.Fields@state.nm.us]

Sent: Wednesday, May 23, 2018 9:09 AM

To: Hong, Kijun < Kijun.Hong@williams.com >; Smith, Cory, EMNRD < Cory.Smith@state.nm.us >; l1thomas@blm.gov

Cc: Ruybalid, Tristen < Tristen.Ruybalid@Williams.com >; Webre, Matt < Matt.Webre@Williams.com >; Powell, Brandon,

EMNRD < Brandon. Powell@state.nm.us>

Subject: RE: C-141 Florence 44 - INITIAL 5-23-18

Please revise your C-141 before submitting to the agencies as it will be denied. Immediate notification was not made to the OCD. Notification to the OCD and the initial C-141 should have been submitted to the OCD 15 days from the initial release discovery on April 20, 2018. As we have discussed on numerous occasions the release reporting threshold is at 50 MCF and 12 cyds of impacted soil removal. As well, please provide the load tickets of the impacted soil that was disposed of at the landfarm.

Thank you,

Vanessa Fields
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 119
Cell: (505) 419-0463
vanessa.fields@state.nm.us

From: Hong, Kijun < Kijun.Hong@williams.com > Sent: Wednesday, May 23, 2018 8:41 AM

To: Fields, Vanessa, EMNRD < Vanessa. Fields@state.nm.us >; Smith, Cory, EMNRD < Cory. Smith@state.nm.us >;

l1thomas@blm.gov

Cc: Ruybalid, Tristen < Tristen.Ruybalid@Williams.com>

Subject: C-141 Florence 44 - INITIAL 5-23-18

Please find attached the initial C-141 for the release Williams had on our Florence 44 pipeline due to external corrosion.

A hard copy will be sent to your respective offices.

Thank You! Kijun



<u>Kijun Hong</u> | Williams | Environmental Specialist | West – Four Corners Area Office: 505-632-4475 | Cell: 505-436-8457 | 1755 Arroyo Dr., Bloomfield, NM 87413



This email originates outside of Williams. Use caution if this message contains attachments, links or requests for information.

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 August 8, 2011

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

			Rele	ease]	Notific	ation	and Co	rrective A	ction				
							OPERA	ΓOR		Initi	al Report		Final Report
	ompany: Wil						Contact: Ki						
	755 Arroyo l		ington, N	IM 874	13			No.: (505) 632-4	1475				
Facility Na	me: Federal	F1					Facility Typ	e: Pipeline					
Surface Ow	ner: BLM				Mineral	Owner				BLM F	Project No.		
					LOCA	TION	OF REI	LEASE					
Unit Letter B	Section 16	Township 27N	Range 10W	Feet 1	rom the	North/	South Line	Feet from the	East/W	Vest Line	County San Juan		
				La	titude <u>36</u>	.57987	_Longitude	e <u>-107.89777</u>					
					NAT	URE	OF RELI	EASE					
Type of Rele	ease: Pipeline	leak					Volume of				Recovered:		
							9.6451 MC	CF Natural Gas		0 MCF	Natural Gas		
							140 yards removed s	of impacted soil o far.	,	140 yard	s of impact	ed soil	removed so
Source of Re	lease: Failed	pipeline	4				A CONTRACTOR OF THE CONTRACTOR	lour of Occurrence 9:00AM	ce:		Hour of Dis		:
							772472010	@ 7.00AN1		11241201	0 @ 7.00/11		2 4 1 1
Was Immedi	ate Notice Giv		Ves X	l No [Not Red	nuired	If YES, To	Whom? Court	esy Notif	fication e	mail sent 7/2	24/2018	8
By Whom?	NA		103	110 [quireu	Date and H	Iour: NA					
													19
Was a Water	course Reache	ed? □	Yes 🗵	No			If YES, Vo	olume Impacting t	the Water	rcourse.	NA		
If a Watercon	urse was Impa	cted, Descri	ibe Fully.	NA									
	use of Problem												
Failure in th	ne pipeline. U	pon discov	ery, the s	ection o	f pipe was	isolate	d and blown	ı down.					
	ea Affected and currently in				acted soil	have be	en removed	so far.					
I haraby conti	ify that the inf	ormation ai	von above	ic tmic	and sample	ata ta th	a bast of my	knowledge and u	un domatan	d that mun	quant to NIM	OCD =	ulaa and
								nd perform correct					
public health	or the environ	nment. The	acceptano	e of a C	2-141 repor	t by the	NMOCD m	arked as "Final R	eport" do	oes not rel	ieve the ope	rator of	fliability
								on that pose a three the operator of					
	, or local laws			tance o	a C-141 I	cport de	ics not renev	e the operator or	responsit	office to the control of the control	omphanee v	ritii airy	y other
	11	10	2					OIL CON	SERV	ATION	DIVISIO	N/	
4 1 4	Lix	~ #					A 1 1	F				#	1
Signature:	70	,,,) (Approved by	Environmental S	pecialist:	1/2	6/	1	1
Printed Name	e: Kijun Hong	g									/> "		
	onmental Spec						Approval Dat	e. 9/4/1	4 F	Expiration	Date:		
								/				1,	
	ess: kijun.hon	0.				- (C 21	Approval: For		, (Attached		
Date: 8/14/20	018	Pho	ne: (505)	632-44	75	-	Dite Ku	tothe 3 C	>eoff	to audo	e		

* Attach Additional Sheets If Necessary

#NCS 18 24348377

HMOCD

AUG 1 7 2018

DISTRICT III



Ranking Score Determination

Site Name: Federal F1

Legal Description: Unit B, Section 16, T27N, R10W

GPS Coordinates: 36.57987, -107.89777

Ranking Score based on NMOCD <u>Guidelines for Remediation of Leaks</u>, Spills, and Releases dated August 13, 1993.

Depth to Ground - The operator should determine the depth to ground water at each site. The depth to ground water is defined as the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water. If the exact depth to ground water is unknown, the ground water depth can be estimated using either local water well information, published regional ground water information, data on file with the New Mexico State Engineer Office or the vertical distance from adjacent ground water or surface water.

Notes: The nearest depth to water data was located 2,125 meters to the northwest with an altitude of 5,982ft and a depth to ground water of 55ft. Given that the release location is at an elevation of 6,086ft, it is assumed that the depth to ground water at the release location is 159ft.

			-		
Depth to Groundwater	<50 feet	50 – 99 feet	(>100 feet	
Ranking Score (circle one)	20	10	1	0	
		•			

Wellhead Protection Area - The operator should determine the horizontal distance from all water sources including private and domestic water sources. Water sources are defined as wells, springs or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes.

Notes: There are no water sources within 1000ft from the release location.

Wellhead Protection Area	<1000 from a water source; or <200 feet fr	rom a pri	ate domestic water	source
Ranking Score (circle one)	Yes → 20		No → 0)
		_		<i>y</i>

Distance To Nearest Surface Water Body - The operator should determine the horizontal distance to all downgradient surface water bodies. Surface water bodies are defined as perennial rivers, streams, creeks, irrigation canals and ditches, lakes, ponds and playas.

Notes: The nearest surface water body to the release location is an intermittent stream 289.8ft to the northwest.

Distance to Surface Water Body	<200 horizontal feet	200 – 1,000 horizontal feet	>1,000 horizontal feet
Ranking Score (circle one)	20	10	0

Remediation Action Levels

Ranking Score (Circle One)	>19		10 - 19	0 - 9
Benzene			10 mg/kg	
BTEX (total)			50 mg/kg	
TPH (GRO and DRO)	100 mg/kg		1,000 mg/kg	5,000 mg/kg
· · · · · · · · · · · · · · · · · · ·		-		

Ranking Completed by: Kijun Hong

Date: 8/3/2018

Sources:

GPS Conversion Tool

New Mexico Water Rights Reporting System - Water Column/Average Depth to Water Report

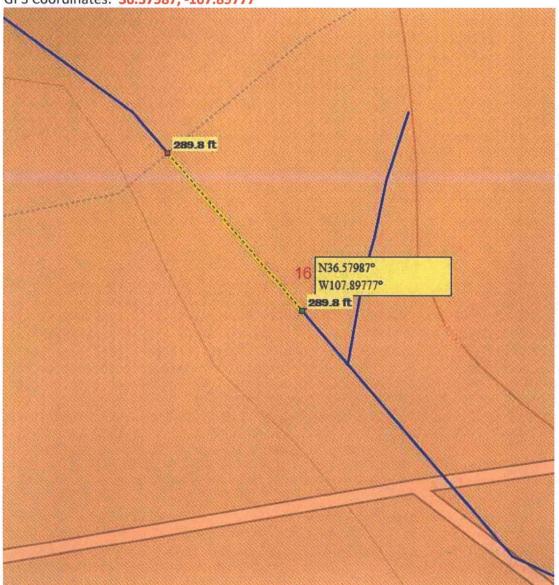
New Mexico Oil and Gas Map

Ranking Score Determination

Site Name: Federal F1

Legal Description: Unit B, Section 16, T27N, R10W

GPS Coordinates: **36.57987, -107.89777**





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

		POD													
		Sub-		Q	Q	Q								,	Water
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	X	Y	DistanceDep	thWellDep	thWater C	olumn
<u>SJ 00032</u>		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	235	60	175
SJ 00033		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	204		
SJ 00034		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	235	170	65
SJ 03977 POD1		SJ	SJ	4	2	4	03	27N	10W	242760	4054481 🌑	3076	275	94	181
SJ 04045 POD1		SJ	SJ	1	4	2	11	27N	10W	244148	4053538	3685	310	50	260

Average Depth to Water:

93 feet

Minimum Depth:

50 feet

Maximum Depth:

170 feet

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 240723.19

Northing (Y): 4052175.91

Radius: 5000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

8/3/18 8:54 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

X

Q64 Q16 Q4 Sec Tws Rng

2 2 08 27N 10W

239378 4053822*



Y

Driller License:

Driller Company:

Driller Name:

Well Tag

CONLEY COX

POD Number

SJ 00032

Drill Start Date: 07/05/1953

Drill Finish Date:

07/11/1953

Plug Date:

Log File Date:

12/16/1953

8.63

PCW Rcv Date:

Source:

Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:

235 feet

Depth Water:

60 feet

Water Bearing Stratifications:

Bottom Description Top 55

67 Sandstone/Gravel/Conglomerate

165

Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom

55 67 195 165

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

8/3/18 8:55 AM

POINT OF DIVERSION SUMMARY

^{*}UTM location was derived from PLSS - see Help

Responsible Party

Harvest Midstream

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

OGRID

	e	Kijun Hong		Contact Te	lephone	(505) 632-4475	
Contact email	I	kijun.hong@will	iams.com	Incident #	(assigned by OCD)	NCS 18276	31854
Contact maili	ng address	1755 Arroyo Dr.	, Farmington, NM	M 87413			
atitude		36.597103			-10	7.815218	1
	-		(NAD 83 in dec	imal degrees to 5 decim	nal places)		
Site Name	Hanks 17			Site Type	Pipeline		
Date Release	Discovered	9/17/2018		API# (if app	licable)		The state of the s
Unit Letter	Section	Township	Range	Coun	ity		
M	5	27N	9W	San J	uan		
			ibal Private (A	Volume of 1	Release		for the
			Nature and	l Volume of l		1, 11, 1,	
Crude Oil	Materia		Nature and	l Volume of l		volumes provided below) ered (bbls)	
	Materia	al(s) Released (Select al Volume Release Volume Release	Nature and	l Volume of l	justification for the volume Recov	volumes provided below) rered (bbls) rered (bbls) 104 Yard	s of impacted
Crude Oil	Materia	al(s) Released (Select al Volume Release Volume Release soil Is the concentrat	Nature and that apply and attached (bbls) and (bbls) and (bbls) to do to of dissolved c	l Volume of l	justification for the v	rered (bbls) rered (bbls) 104 Yard	s of impacted
Crude Oil	Materia I Water	al(s) Released (Select al Volume Release Volume Release	Nature and that apply and attached (bbls) and (bbls) and (bbls) to (bbls) 104 Yard tion of dissolved color >10,000 mg/l?	l Volume of l	volume Recov	rered (bbls) rered (bbls) 104 Yard	s of impacted
☐ Crude Oil	Materia I Water	Volume Release Volume Release Volume Release soil Is the concentrat produced water Volume Release	Nature and that apply and attached (bbls) and (bbls) and (bbls) to (bbls) 104 Yard tion of dissolved color >10,000 mg/l?	l Volume of l calculations or specific ls of impacted hloride in the	justification for the v Volume Recov Volume Recov soil removed ☐ Yes ☑ No Volume Recov	rered (bbls) rered (bbls) 104 Yard	s of impacted
☐ Crude Oil ☐ Produced ☐ Condensa	Materia l Water	Al(s) Released (Select al Volume Release Soil Is the concentrate produced water Volume Release Volume Release Volume Release	Nature and that apply and attached (bbls) and (bbls) and (bbls) to dissolved a constraint of the const	l Volume of l calculations or specific ls of impacted hloride in the	justification for the v Volume Recov Volume Recov soil removed ☐ Yes ☑ No Volume Recov Volume Recov	vered (bbls) vered (bbls) 104 Yard vered (bbls)	
☐ Crude Oil ☐ Produced ☐ Condensa ☐ Natural G	Materia Water ate Gas escribe)	Al(s) Released (Select al Volume Release Soil Is the concentrate produced water Volume Release Volume Release Volume Release	Nature and that apply and attached (bbls) and (bbls) and (bbls) to of dissolved control of dissolved control of (bbls) and (bbls) an	l Volume of l calculations or specific ls of impacted hloride in the	justification for the v Volume Recov Volume Recov soil removed ☐ Yes ☑ No Volume Recov Volume Recov Volume Recov	vered (bbls) vered (bbls) 104 Yard vered (bbls) vered (bbls) vered (Mcf) 0 MCF	
☐ Crude Oil ☐ Produced ☐ Condensa ☐ Natural G	Materia Water ate Gas escribe)	Volume Release Soil Is the concentrate produced water Volume Release Volume Release Volume Release Volume Release Volume Release Volume/Weight	Nature and that apply and attached (bbls) and (bbls) and (bbls) to of dissolved control of dissolved control of (bbls) and (bbls) an	l Volume of l calculations or specific ls of impacted hloride in the	Justification for the volume Recovers of the Volume Recovers of the Volume Recovers of the Volume Recovers of Volume Recovers Volume Recovers Volume/Weight	vered (bbls) vered (bbls) 104 Yard vered (bbls) vered (bbls) vered (Mcf) 0 MCF nt Recovered (provide	



State of New Mexico Oil Conservation Division

Incident ID	
District RP	kī.
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the	ne responsible party consider this a major release?
release as defined by 19.15.29.7(A) NMAC?	Exceeded 50 cubic yards of conta	taminated soil removed per OCD guidance.
∑ Yes ☐ No		
If YES, was immediate no	otice given to the OCD? By whom?	? To whom? When and by what means (phone, email, etc)?
Yes, Cory Smith, Vaness	sa Field, and Jim Griswold were n	notified by email on 9/18/2018 by Kijun Hong.
	Init	tial Response
The responsible p	party must undertake the following actions in	mmediately unless they could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.	
_	s been secured to protect human hea	alth and the environment.
-		erms or dikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been remo	loved and managed appropriately.
If all the actions described	d above have not been undertaken, e	explain why:
D = 10.15.20.0 D (4) ND4	(A C 4l - many some	mence remediation immediately after discovery of a release. If remediation
has begun, please attach	a narrative of actions to date. If re-	emedial efforts have been successfully completed or if the release occurred MAC), please attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain relement. The acceptance of a C-141 report ate and remediate contamination that po	ete to the best of my knowledge and understand that pursuant to OCD rules and lease notifications and perform corrective actions for releases which may endanger to by the OCD does not relieve the operator of liability should their operations have ose a threat to groundwater, surface water, human health or the environment. In perator of responsibility for compliance with any other federal, state, or local laws
Printed Name: Kiji	un Hong	Title: Environmental Specialist
Signature:	15-16A	Date:
email: kijun.hong@y	villiams.com	Telephone: <u>505-436-8457</u>
	Λ)
OCD Only		
Received by:		Date: /0/3/18

Cause of Release

Pipeline failure due to corrosion.

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible	Party	Williams Four Corners LLC OG)		
Contact Nar	ne	Kijun Hong			t Telephone	(505) 632-4475	
Contact ema	ail	il kijun.hong@williams.com			t # (assigned by OCD)	DCS 182 89 37 611	
Contact mai	ling address	1755 Arroyo Dr	., Farmington, N			100.000 81 31 011	
			Location	of Release	Source		
Latitude		36.674729			e -10	7.870416	
Site Name	Trunk J			Site Typ	e Pipeline		
Date Release	Discovered	8/24/2018		API# (if	API# (if applicable)		
Unit Letter	Section	Township	Dance		,	2 1 9	
D	11	28N	Range 10W		Juan		
Surface Owner	r: \square State	Federal Tr	ihal Π Private ()	Name:			
			Nature and	Volume of	f Release		
Crude Oil		Volume Release	d (bbls)	carculations of speci	Volume Recove	ered (bbls)	
Produced	Water	Volume Released (bbls) 23 BBLs			Volume Recovered (bbls) 55 Yards of impacted removed		
		Is the concentration of dissolved chloride produced water >10,000 mg/l?		nloride in the	☐ Yes ☐ No		
Condensa	te	Volume Released	d (bbls)		Volume Recove	ered (bbls)	
Natural G	as	Volume Released (Mcf)			Volume Recove	red (Mcf)	
Other (des	scribe)	Volume/Weight Released (provide units)			Volume/Weight	Volume/Weight Recovered (provide units)	

DISTRICT III

SEP 1 2 2018

NMOCD



State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release? Unauthorized release exceeding 25 bbls of liquid that may with reasonable probability reach a
	watercourse.
Yes No	
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, Matt Webre (Willia	nms) notified Cory Smith, Vanessa Fields, and Jim Griswold (OCD) by email on 8/24/2018 @ 3:47pm.
	Initial Response
The responsible p	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
The source of the rele	
The impacted area ha	s been secured to protect human health and the environment.
Released materials ha	ve been contained via the use of berms or dikes, absorbent pads, or other containment devices.
All free liquids and re	coverable materials have been removed and managed appropriately.
If all the actions described	above have not been undertaken, explain why:
Per 19 15 29 8 B (4) NM	AC the responsible party may commence remediation immediately after discovery of a release. If remediation
has begun, please attach a	a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred t area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the infor	mation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and
regulations all operators are a public health or the environm	required to report and/or file certain release notifications and perform corrective actions for releases which may endanger nent. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have
failed to adequately investigated	te and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In
and/or regulations.	a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name: Kiju	n Hong Title: Environmental Specialist
Signature:	Date: <u>9/7/2018</u>
email: <u>kijun.hong@w</u>	illiams.com Telephone: 505-436-8457
1	//
OCD Only	
Received by:	Date: 10/16/18
	7100000

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	A

NMOCD Release No		se Noti	ification	
	OCT 17 2018	e Party		
Responsible Party	ISTRICT III			-
Contact Name		ream Company		GRID
Contact email	Kijun Hong			ontact Telephone (505) 632-4475
		stmidstream.com		cident # (assigned by OCD)
Contact mailing a	ddress 1755 Arroyo D	r., Farmington, N	MM 87413	NVF 1839 148087
		Location	of Rele	ease Source
Latitude	36.604722	(NAD 83 in de	Lon ecimal degrees	ngitude
Site Name MN	Galt		Site	e Type Pipeline
Date Release Disco	overed 10/4/2018			PI# (if applicable)
III. it I attack				W II
-	Township 27N	Range County		
E 1 27N 10W San Juan				
Surface Owner:	State Federal Ti	ribal Private (A	Name:	,
	_)
		Nature and	l Volum	e of Release
	Material(s) Released (Select al	l that apply and attach	calculations or	r specific justification for the volumes provided below)
Crude On	volume Release	d (bbis)		Volume Recovered (bbls)
Produced Water	Volume Release	d (bbls)		Volume Recovered (bbls)
	Is the concentrat	ion of dissolved ch	hloride in th	ne Yes No
Condensate	produced water >10,000 mg/l? Condensate Volume Released (bbls)			Volume Recovered (bbls)
Natural Gas			on in progr	
✓ Natural Gas Volume Released (Mcf) Calculation in progress ☐ Other (describe) Volume/Weight Released (provide units)		(1.201)		
Volume/Weight Released (provide units) Volume/Weight Recovered (provide units)			Volume/Weight Recovered (provide units)	
Cause of Release				
Dipoline fellows de				
Pipeline failure du	e to corrosion.			

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No If YES, was immediate n	If YES, for what reason(s) does the r Unauthorized natural gas release i investigation shows this to be a gas otice given to the OCD? By whom?	in a dry wash wi s only release wi	ith reasonable potential to i th no liquids.	mpact the wash. Initial
	d Cory Smith, Vanessa Fields, and J			
		al Response		
The responsible	party must undertake the following actions imn	nediately unless they	could create a safety hazard that wo	uld result in injury
☑ Released materials h☑ All free liquids and r	ease has been stopped. as been secured to protect human health ave been contained via the use of bern recoverable materials have been removed above have not been undertaken, ex	ns or dikes, absorved and managed	rbent pads, or other containm	ent devices.
has begun, please attach within a lined containmed. I hereby certify that the inf regulations all operators ar public health or the environ	MAC the responsible party may comma a narrative of actions to date. If renent area (see 19.15.29.11(A)(5)(a) NM formation given above is true and complete e required to report and/or file certain relement. The acceptance of a C-141 report ligate and remediate contamination that pos of a C-141 report does not relieve the operation.	e to the best of my ase notifications and by the OCD does n	ch all information needed for knowledge and understand that and perform corrective actions for the relieve the operator of liability dwater, surface water, human he	pursuant to OCD rules and r releases which may endanger by should their operations have ealth or the environment. In
	jun Hong vestmidstream.com	Date:	Environmental Specialist 10/16/2018 505-436-8457	
OCD Only Received by:		Date: _	10/12/15018	

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

N	MOCD	-				
OCT	1 7 2018	Release Notification				
DISTRICT 111 Responsible Party						
Responsible Party	Harvest Midstre	eam		OGRID		
Contact Name	Kijun Hong			Contact T	elephone	(505) 632-4475
Contact email	khong@harvest	midstream.com		Incident #	(assigned by OÇD)	Tr 44
Contact mailing address	1755 Arroyo Dr	., Farmington, N	M 874	13	NVF 18	329149123
Latitude	36.926192	Location		elease S	ource	
	000/201/2	(NAD 83 in dec	cimal deg	grees to 5 decin	nal places)	08.143259
Site Name Lateral A-	15			Site Type	Pipeline	
Date Release Discovered	9/30/2018			API# (if app	olicable)	
Unit Letter Section	Townshin	D		-		
L 6	Township 31N	Range County 12W San Juan				
Surface Owner: State Federal Tribal Private (Name:						
surface Owner: State	Federal Ir	ibal 🔀 Private (/	Vame: _)
		Nature and	l Vol	ume of I	Release	
Materia	al(s) Released (Select al	that apply and attach	calculation	ons or specific		volumes provided below)
Crude Oil	Volume Release	,			Volume Recovered (bbls)	
Produced Water	Volume Released (bbls) Calculation in progr			Volume Recov	vered (bbls) Calculation in progress	
Is the concentration of dissolved chloride in the		in the	☐ Yes ☐ No			
produced water >10,000 mg/l? Condensate Volume Released (bbls)			Volume Recovered (bbls)			
✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Released (Mcf) Calculation in programmer ✓ Natural Gas Volume Releas		rogress	Volume Recovered (Mcf) 0			
Other (describe) Volume/Weight Released (provide units)			Volume/Weight Recovered (provide units)			
				<i>d</i>		
Cause of Release						
Pipeline failure due to c	orrosion.					

State of New Mexico Oil Conservation Division

Incident ID	
District RP	,
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the	responsible par	ty consider this a major release?
release as defined by 19.15.29.7(A) NMAC?	Unauthorized release expected to	exceed 25 bbls	of liquid including historical impacts.
~ .	Children Policies Capacital to		
☐ Yes ☐ No			
If YES, was immediate no	otice given to the OCD? By whom?	To whom? Wh	nen and by what means (phone, email, etc)?
Yes, Kijun Hong notified	d Cory Smith, Vanessa Fields, and	Jim Griswold ((OCD) by email on 10/1/2018 @ 12:09pm.
	Initi	al Respons	e
The responsible p	party must undertake the following actions im.	mediately unless the	y could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.		
The impacted area ha	s been secured to protect human heal	Ith and the envir	onment.
Released materials ha	we been contained via the use of bern	ms or dikes, abso	orbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been remo	ved and manage	d appropriately.
If all the actions described	d above have <u>not</u> been undertaken, ex	xplain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.			
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.			
Printed Name: Kiji	ın Hong	Title:	Environmental Specialist
Signature:	15-1A	Date:	10/15/2018
email: <u>khong@harve</u>	estmidstream.com	Telephone:	505-436-8457
OCD Only Received by:		Date: _	10/18/15018

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Harvest Midstream Company		OGRID 3'	7388		
Contact Name Kijun Hong		Contact To	elephone 505-632-4475		
Contact email khong@harvestmidstream.com		Incident #	NCS1824348377		
ling address	1755 Arroyo Dr.,	Farmington, NM	87413		
		-			
		Location	of R	Release S	ource
57987					
		(NAD 83 in de	ecimal de	grees to 5 decin	nal places)
ederal F1				Site Type I	Pipeline
Discovered	7/24/2018 @ 9:00	AM		API# (if app	olicable)
I c .:		-			
			-		uty
10	27N	10 W	San.	Juan	
Surface Owner: State Federal Tribal Private (Name: Nature and Volume of Release Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)					
	Volume Release	d (bbls)			Volume Recovered (bbls)
Water					Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10.000 mg/l?		in the	☐ Yes ☐ No	
nte	Volume Release	d (bbls)			Volume Recovered (bbls)
as	Volume Release	d (Mcf) 9.6451			Volume Recovered (Mcf) 0
scribe)	Volume/Weight Released (provide units)			Volume/Weight Recovered (provide units)	
	ne Kijun Horili khong@haling address 57987 ederal F1 Discovered Section 16 r: State Material Water	ne Kijun Hong il khong@harvestmidstream.c ling address 1755 Arroyo Dr., 57987 cderal F1 Discovered 7/24/2018 @ 9:00 Section Township 16 27N r: State Federal Tr Material(s) Released (Select al Volume Release Water Volume Release Is the concentrate produced water in the Volume Release ate Volume Release Volume Release Volume Release Volume Release Volume Release	Location Location NAD 83 in d Ederal F1 Discovered 7/24/2018 @ 9:00 AM Section Township Range 16 27N 10W Tr: State Federal Tribal Private (Nature an Material(s) Released (Select all that apply and attact of Volume Released (bbls) Water Volume Released (bbls) Is the concentration of dissolved produced water >10,000 mg/l? Volume Released (bbls) Is the Volume Released (bbls) Wolume Released (bbls) Volume Released (bbls)	Location of R Internation Internation	Contact To ill khong@harvestmidstream.com Incident # In



State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the response	onsible party consider this a major release?	
19.15.29.7(A) NMAC?			
☐ Yes ⊠ No			
ICALC ' 1' '	d d ocean a ocean		
Courtesy notification ema	office given to the OCD? By whom? To will sent 7/24/18	hom? When and by what means (phone, email, etc)?	
	Initial R	esponse	
The responsible p	party must undertake the following actions immediate	ly unless they could create a safety hazard that would result in injury	
The source of the rele	ase has been stopped.		
☐ The impacted area has	s been secured to protect human health and	the environment.	
Released materials ha	ve been contained via the use of berms or	dikes, absorbent pads, or other containment devices.	
All free liquids and re	coverable materials have been removed ar	nd managed appropriately.	
If all the actions described	l above have <u>not</u> been undertaken, explain	why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.			
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.			
Printed Name: Kijun Hong	5	Title: Environmental Specialist	
Signature:		Date:	
email: khong@harvestmid	stream.com	Telephone: <u>505-632-4475</u>	
OCD Only			
Received by:		Date:	

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)		
Did this release impact groundwater or surface water?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	⊠ Yes □ No		
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No		
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No		
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No		
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No		
Are the lateral extents of the release within a 100-year floodplain?			
Did the release impact areas not on an exploration, development, production, or storage site?	⊠ Yes □ No		
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.			
Characterization Report Checklist: Each of the following items must be included in the report.			
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information Topographic/Aerial maps Laboratory data including chain of custody			

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.			
Printed Name: Kijun Hong	Title: _Environmental Specialist		
Signature:	Date: 11/9/2016		
email: <u>khong@harvestmidstream.</u> com	Telephone: _505-635-4475_		
OCD Only			
Received by:	Date:		

Form C-141 Page 6

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.11 NMAC
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
□ Description of remediation activities
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Kijun Hong Title: Environmental Specialist Date: It / G / Dal & Telephone: _505-632-4475
OCD Only Received by: Date:
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:
Printed Name: Cory Title: Four rownessed Spe





848 East Second Avenue Durango, Colorado 81301 970 385 1096

October 30, 2018

Mr. Cory Smith New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

RE:

Request for Closure Harvest Four Corners, LLC Federal F1 Release

Incident Report: NCS1824348377 San Juan County, New Mexico

Dear Mr. Smith:



On behalf of Harvest Four Corners, LLC (Harvest), LT Environmental, Inc. (LTE) presents the following letter report detailing remediation and soil sampling activities at the Federal F1 (Site) in Unit B, Section 16, Township 27 North, Range 10 West, in San Juan County, New Mexico (Figure 1). The purpose of the excavation and soil sampling activities was to address impacts to soil after natural gas was released from a pipeline. The release was discovered on July 24, 2018. Upon discovery, the section of pipe was isolated and blown down. The release volume was estimated to be approximately 9.6451 thousand cubic feet (MCF) of natural gas. Williams Four Corners LLC (Williams) reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Attachment 1) on August 14, 2018. On October 1, 2018, Williams assets were purchased by Harvest who is proceeding with remediation and closure of the release. Based on the initial response efforts and the results of the confirmation soil sampling, Harvest is requesting no further action for this release event.

BACKGROUND

The final site characterization occurred after August 14, 2018; therefore, LTE applied Table 1, the Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC) to determine remediation action levels. Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data and known aquifer properties. The nearest permitted water well, SJ 00032, is located approximately 1.3 miles northwest of the Site, with a depth to groundwater of 60 feet bgs and a total depth of 235 feet bgs. The water well is approximately 104 feet lower in elevation than the Site. The closest continuously flowing water or significant watercourse to the Site is a first order tributary to an unnamed arroyo located approximately 40 feet south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution,





church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within an unstable area, 100-year floodplain, or overlying a subsurface mine. Based on these criteria, the following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 100 mg/kg total petroleum hydrocarbons (TPH); and 600 mg/kg chloride.

EXCAVATION ACTIVITIES

On August 23, 2018, Harvest excavated impacted soil. The final excavation extent was approximately 1,320 square feet in area and extended to 27 feet bgs. The lateral extent of the remediation footprint was approximately 40 feet by 33 feet and is illustrated on Figure 2. Approximately 140 cubic yards of impacted soil were removed using a backhoe. Impacted soil was transported and properly disposed of at the Envirotech Landfarm #2 Facility in Bloomfield, New Mexico. Photographs of the final excavation extent are included as Attachment 2.

SOIL SAMPLING

Following removal of impacted soil, Harvest collected 5-point composite soil samples every 200 square feet or less from the sidewalls and floor of the excavation to document removal of impacted soil. Eight composite soil samples were collected. Soil sample locations are depicted on Figure 2. The samples were shipped to Hall Environmental Laboratories in Albuquerque, New Mexico, under strict chain-of-custody procedures for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) by EPA Method 8015M, and chloride by EPA Method 300.0.

ANALYTICAL RESULTS

Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were compliant with NMOCD Table 1 closure criteria in all soil samples. Chloride concentrations were below laboratory detection limit in all samples. TPH concentrations ranged from below the laboratory detection limit to 36 mg/kg in soil sample West Wall South End. BTEX concentrations ranged from below the laboratory detection limit to 2.9 mg/kg in soil sample West Wall South End. Laboratory analytical results are summarized in Table 1. Complete laboratory analytical reports are included as Attachment 3.

CONCLUSIONS

Approximately 140 cubic yards of impacted soil were excavated from the release footprint, and laboratory analytical results of eight confirmation soil samples indicated compliance with NMOCD Table 1 closure criteria. Following the receipt of soil sample laboratory analytical results, the excavation area was backfilled with clean imported fill material to match the pre-existing





grade. Based on the data collected, Harvest is requesting closure of this release per NMAC 19.15.29.12 Amended August 2018.

If you have any questions or comments, please do not hesitate to contact Brooke Herb at (970) 385-1096 or bherb@ltenv.com.

Sincerely,

LT ENVIRONMENTAL, INC.

Brooke Herb

Project Geologist

Ashley L. Ager, M.S., P.G.

Senior Geologist

cc:

Vanessa Fields, NMOCD Whitney Thomas, BLM

Attachments:

Figure 1

Site Location Map

Figure 2

Site Map

Table 1

Soil Analytical Results

Attachment 1

Initial/Final NMOCD Form C-141

Attachment 2

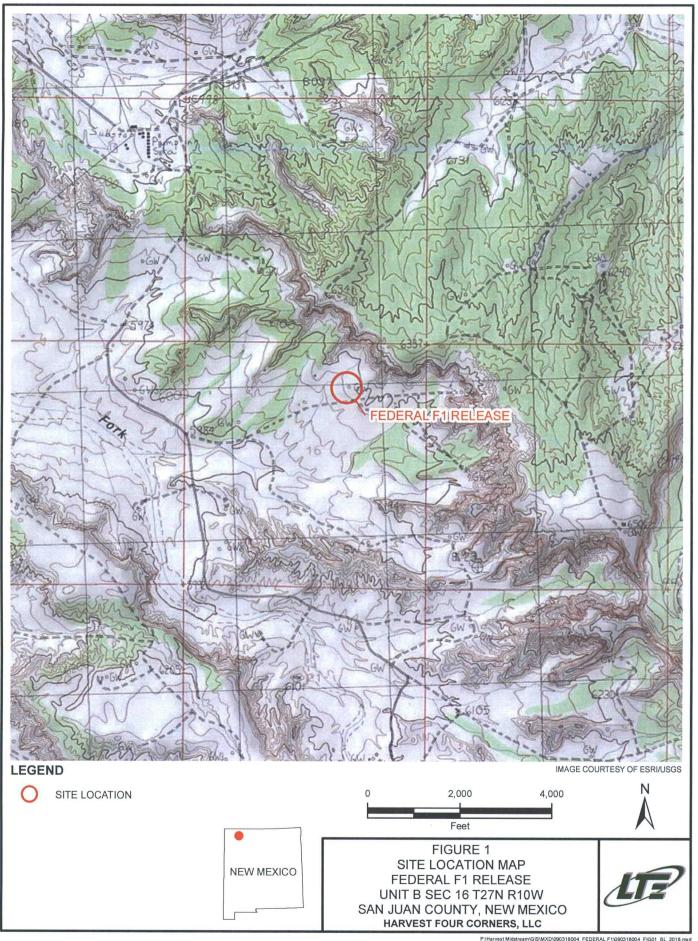
Photographic Log

Attachment 3

Laboratory Analytical Report







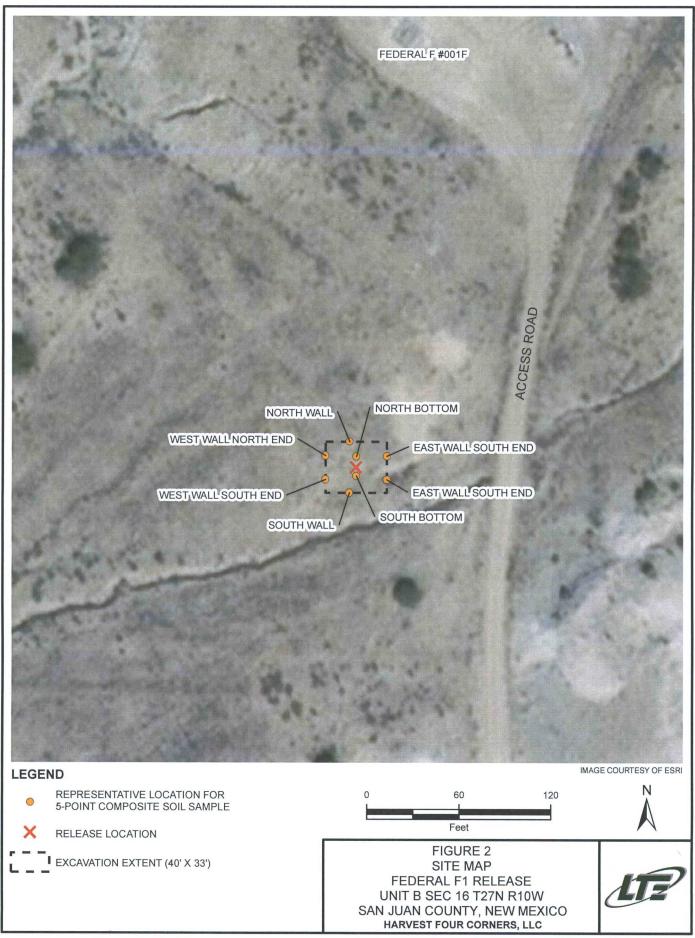




TABLE 1 SOIL ANALYTICAL RESULTS

FEDERAL F1 RELEASE SAN JUAN COUNTY, NEW MEXICO HARVEST FOUR CORNERS, LLC

Sample Name	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Sum of GRO + DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
West Wall North End	8/23/2018	<0.024	0.096	0.048	0.36	0.504	18	10	<50	28	28	<30
North Bottom	8/23/2018	<0.025	0.054	<0.049	0.10	0.15	<4.9	<9.9	<49	<9.9	<49	<30
North Wall	8/23/2018	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<10	<50	<10	<50	<30
East Wall South End	8/23/2018	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.9	<49	<9.9	<49	<30
South Bottom	8/23/2018	<0.025	0.27	0.13	1.3	1.7	17	<9.8	<49	17	17	<30
South Wall	8/23/2018	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.8	<49	<9.8	<49	<30
East Wall South End	8/23/2018	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<10	<50	<10	<50	<30
West Wall South End	8/23/2018	0.048	0.72	0.21	1.9	2.9	36	<9.9	<50	36	36	<30
NMOCD Table 1 Clo	sure Criteria	10	NE	NE	NE	50	NE	NE	NE	NE	100	600

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

NE - not established

Table 1 - Closure Criteria for Soils Impacted by a Release per 19.15.29 August 2018

TPH - total petroleum hydrocarbons

< - indicates result is below laboratory detection limit





<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 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

Form C-141 Revised August 8, 2011

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

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

Release Notification and Corrective Action								
	OPERATOR							
Name of Company: Williams Four Corners LLC	Contact: Kijun Hong							
Address: 1755 Arroyo Dr., Farmington, NM 87413	Telephone No.: (505) 632-4475							
Facility Name: Federal F1	Facility Type: Pipeline							
Surface Owner: BLM Mineral Own	er	BLM Project No.						
LOCATIO	N OF RELEASE							
Unit Letter Section Township Range Feet from the Nort B 16 27N 10W	h/South Line Feet from the East	/West Line County San Juan						
	87_Longitude -107.89777	San Gana						
NATURE OF RELEASE								
Type of Release: Pipeline leak	Volume of Release:	Volume Recovered:						
	9.6451 MCF Natural Gas	0 MCF Natural Gas						
	140 sands of imported sail	140 wards of improved as it removed as						
	140 yards of impacted soil removed so far.	140 yards of impacted soil removed so far.						
Source of Release: Failed pipeline	Date and Hour of Occurrence:	Date and Hour of Discovery:						
	7/24/2018 @ 9:00AM	7/24/2018 @ 9:00AM						
Was Immediate Notice Given?	If YES, To Whom? Courtesy No	stification email sent 7/24/2018						
☐ Yes ☒ No ☐ Not Required	1							
By Whom? NA	Date and Hour: NA							
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA							
If a Watercourse was Impacted, Describe Fully.* NA								
Describe Cause of Problem and Remedial Action Taken.*								
Failure in the pipeline. Upon discovery, the section of pipe was isola	ted and blown down.							
Describe Area Affected and Cleanup Action Taken.*	haan namawad sa fan							
Remediation currently in progress. 140 yards of impacted soil have	been removed so far.							
I hereby certify that the information given above is true and complete to regulations all operators are required to report and/or file certain release public health or the environment. The acceptance of a C-141 report by t	notifications and perform corrective ac	ctions for releases which may endanger						
should their operations have failed to adequately investigate and remedia	te contamination that pose a threat to	ground water, surface water, human health						
or the environment. In addition, NMOCD acceptance of a C-141 report	does not relieve the operator of respon	sibility for compliance with any other						
federal, state, or local laws and/or regulations.	OIL CONSERV	VATION DIVISION						
	OIL CONSER	VATION DIVISION						
Signatura	Approved by Environmental Speciali	ist:						
Signature:								
Printed Name: Kijun Hong	Т							
Title: Environmental Specialist	Approval Date:	Expiration Date:						
E-mail Address: kijun.hong@williams.com	Conditions of Approval:	Attached						
Date: 8/14/2018 Phone: (505) 632-4475								

^{*} Attach Additional Sheets If Necessary

Ranking Score Determination

Site Name: Federal F1

Legal Description: Unit B, Section 16, T27N, R10W

GPS Coordinates: 36.57987, -107.89777

Ranking Score based on NMOCD <u>Guidelines for Remediation of Leaks, Spills, and Releases</u> dated August 13, 1993.

Depth to Ground - The operator should determine the depth to ground water at each site. The depth to ground water is defined as the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water. If the exact depth to ground water is unknown, the ground water depth can be estimated using either local water well information, published regional ground water information, data on file with the New Mexico State Engineer Office or the vertical distance from adjacent ground water or surface water.

Notes: The nearest depth to water data was located 2,125 meters to the northwest with an altitude of 5,982ft and a depth to ground water of 55ft. Given that the release location is at an elevation of 6,086ft, it is assumed that the depth to ground water at the release location is 159ft.

Depth to Groundwater	<50 feet	50 – 99 feet		>100 feet	
Ranking Score (circle one)	20	10	1	0	
•					

Wellhead Protection Area - The operator should determine the horizontal distance from all water sources including private and domestic water sources. Water sources are defined as wells, springs or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes.

Notes: There are no water sources within 1000ft from the release location.

Wellhead Protection Area	<1000 from a water source; or <200 feet f	rom a private domestic water source
Ranking Score (circle one)	Yes → 20	$(No \rightarrow 0)$

Distance To Nearest Surface Water Body - The operator should determine the horizontal distance to all downgradient surface water bodies. Surface water bodies are defined as perennial rivers, streams, creeks, irrigation canals and ditches, lakes, ponds and playas.

Notes: The nearest surface water body to the release location is an intermittent stream 289.8ft to the northwest.

			The second second	
Distance to Surface	<200 horizontal feet	200 – 1,000		>1,000 horizontal feet
Water Body		horizontal feet)
Ranking Score (circle one)	20	10		0

Remediation Action Levels

Ranking Score (Circle One)	>19	/	10 - 19	1	0 - 9
Benzene			10 mg/kg	1	
BTEX (total)			50 mg/kg		
TPH (GRO and DRO)	100 mg/kg		1,000 mg/kg		5,000 mg/kg

Ranking Completed by: Kijun Hong

Date: 8/3/2018

Sources:

GPS Conversion Tool

New Mexico Water Rights Reporting System - Water Column/Average Depth to Water Report

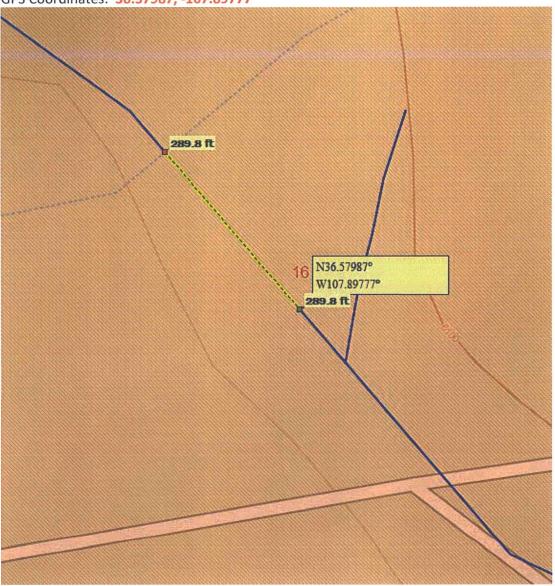
New Mexico Oil and Gas Map

Ranking Score Determination

Site Name: Federal F1

Legal Description: Unit B, Section 16, T27N, R10W

GPS Coordinates: 36.57987, -107.89777





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

		POD													
		Sub-		Q	Q	Q								V	Vater
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	X	Y	DistanceDep	othWellDep	thWater Co	olumn
SJ 00032		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	235	60	175
SJ 00033		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	204		
SJ 00034		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	235	170	65
SJ 03977 POD1		SJ	SJ	4	2	4	03	27N	10W	242760	4054481 🌑	3076	275	94	181
SJ 04045 POD1		SJ	SJ	1	4	2	11	27N	10W	244148	4053538	3685	310	50	260

Average Depth to Water:

93 feet

Minimum Depth:

50 feet

Maximum Depth:

170 feet

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 240723.19

Northing (Y): 4052175.91

Radius: 5000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

8/3/18 8:54 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number**

SJ 00032

Q64 Q16 Q4 Sec Tws Rng

2 2 08 27N 10W

X

239378 4053822*



Driller License:

Driller Company:

Driller Name: **Drill Start Date:** CONLEY COX

07/05/1953

8.63

Drill Finish Date:

07/11/1953

Plug Date:

Log File Date:

12/16/1953

PCW Rcv Date:

Source:

Shallow

Pump Type: Casing Size:

Pipe Discharge Size: Depth Well:

235 feet

Estimated Yield: Depth Water:

60 feet

Water Bearing Stratifications:

Top **Bottom Description** 55

67 Sandstone/Gravel/Conglomerate

165

195 Sandstone/Gravel/Conglomerate

Casing Perforations:

Bottom Top 67

55 195 165

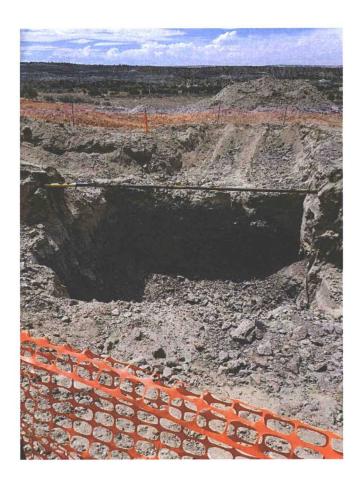
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

8/3/18 8:55 AM

POINT OF DIVERSION SUMMARY

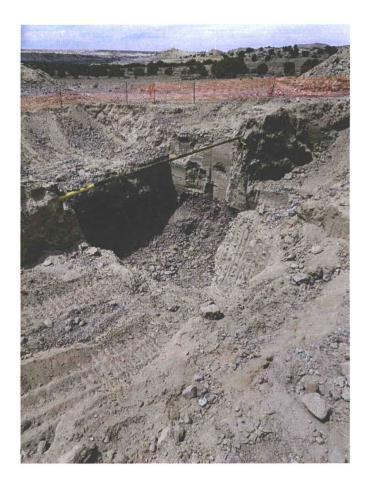
^{*}UTM location was derived from PLSS - see Help





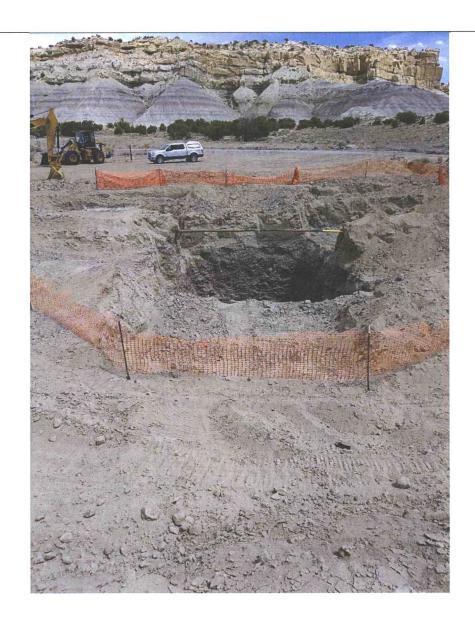
View northeast of the excavation

Project: 090318004	Harvest Four Corners, LLC Federal F1	LE?
August 23, 2018	Photographic Log	Advancing Opportunity



View southeast of the excavation

Project: 090318004	Harvest Four Corners, LLC Federal F1	
August 23, 2018	Photographic Log Advancing Opportunity	



View east of the excavation

Project: 090318004	Harvest Four Corners, LLC Federal F1	LIE
August 23, 2018	Photographic Log	Advancing Opportunity





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

August 29, 2018

Kijun Hong Williams Field Services 1755 Arroyo Dr., Bloomfield, NM 87413 TEL: (505) 632-4442

FAX

RE: Federal F 1 Line Leak

OrderNo.: 1808F09

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/24/2018 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1808F09

Date Reported: 8/29/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Federal F 1 Line Leak

Lab ID: 1808F09-001

Client Sample ID: West Wall North End

Collection Date: 8/23/2018 10:45:00 AM

Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	30		mg/Kg	20	8/28/2018 12:22:04 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst:	Irm
Diesel Range Organics (DRO)	10	10		mg/Kg	1	8/27/2018 4:31:48 PM	39983
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/27/2018 4:31:48 PM	39983
Surr: DNOP	120	50.6-138		%Rec	1	8/27/2018 4:31:48 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	18	4.7		mg/Kg	1	8/27/2018 10:49:19 AM	39981
Surr: BFB	137	15-316		%Rec	1	8/27/2018 10:49:19 AM	39981
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.024		mg/Kg	1	8/27/2018 10:49:19 AM	39981
Toluene	0.096	0.047		mg/Kg	1	8/27/2018 10:49:19 AM	39981
Ethylbenzene	0.048	0.047		mg/Kg	1	8/27/2018 10:49:19 AM	39981
Xylenes, Total	0.36	0.095		mg/Kg	1	8/27/2018 10:49:19 AM	39981
Surr: 4-Bromofluorobenzene	99.8	80-120		%Rec	1	8/27/2018 10:49:19 AM	39981

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 12 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1808F09

Date Reported: 8/29/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Federal F 1 Line Leak

Lab ID: 1808F09-002

Client Sample ID: North Bottom

Collection Date: 8/23/2018 10:55:00 AM

Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	30		mg/Kg	20	8/28/2018 1:24:06 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/27/2018 5:38:11 PM	39983
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/27/2018 5:38:11 PM	39983
Surr: DNOP	117	50.6-138		%Rec	1	8/27/2018 5:38:11 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/27/2018 11:12:42 AM	39981
Surr: BFB	98.4	15-316		%Rec	1	8/27/2018 11:12:42 AM	39981
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.025		mg/Kg	1	8/27/2018 11:12:42 AM	39981
Toluene	0.054	0.049		mg/Kg	1	8/27/2018 11:12:42 AM	39981
Ethylbenzene	ND	0.049		mg/Kg	1	8/27/2018 11:12:42 AM	39981
Xylenes, Total	0.10	0.098		mg/Kg	1	8/27/2018 11:12:42 AM	39981
Surr: 4-Bromofluorobenzene	94.4	80-120		%Rec	1	8/27/2018 11:12:42 AM	39981

Matrix: SOIL

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 2 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1808F09

Date Reported: 8/29/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services Client Sample ID: North Wall

 Project:
 Federal F 1 Line Leak
 Collection Date: 8/23/2018 11:00:00 AM

 Lab ID:
 1808F09-003
 Matrix: SOIL
 Received Date: 8/24/2018 7:45:00 AM

PQL Qual Units Analyses Result **DF** Date Analyzed Batch **EPA METHOD 300.0: ANIONS** Analyst: MRA Chloride ND 8/28/2018 1:36:31 PM 40017 30 mg/Kg **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: Irm 8/27/2018 6:00:21 PM 39983 Diesel Range Organics (DRO) ND 10 mg/Kg Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/27/2018 6:00:21 PM 39983 Surr: DNOP 50.6-138 8/27/2018 6:00:21 PM 39983 119 %Rec **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.9 mg/Kg 8/27/2018 11:36:00 AM 39981 8/27/2018 11:36:00 AM 39981 Surr: BFB 89.0 15-316 %Rec 1 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 8/27/2018 11:36:00 AM 39981 Toluene ND 0.049 8/27/2018 11:36:00 AM 39981 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 8/27/2018 11:36:00 AM Xylenes, Total ND 0.098 mg/Kg 8/27/2018 11:36:00 AM Surr: 4-Bromofluorobenzene 91.3 80-120 %Rec 8/27/2018 11:36:00 AM 39981

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 3 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1808F09

Date Reported: 8/29/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Federal F 1 Line Leak

Lab ID: 1808F09-004

Matrix: SOIL

Client Sample ID: East Wall South End Collection Date: 8/23/2018 11:10:00 AM

Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	8/28/2018 1:48:55 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	:: Irm
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	8/27/2018 6:22:22 PM	39983
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/27/2018 6:22:22 PM	39983
Surr: DNOP	124	50.6-138	%Rec	1	8/27/2018 6:22:22 PM	39983
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/27/2018 11:59:22 AM	39981
Surr: BFB	95.3	15-316	%Rec	1	8/27/2018 11:59:22 AM	39981
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	8/27/2018 11:59:22 AM	39981
Toluene	ND	0.047	mg/Kg	1	8/27/2018 11:59:22 AM	39981
Ethylbenzene	ND	0.047	mg/Kg	1	8/27/2018 11:59:22 AM	39981
Xylenes, Total	ND	0.095	mg/Kg	1	8/27/2018 11:59:22 AM	39981
Surr: 4-Bromofluorobenzene	93.3	80-120	%Rec	1	8/27/2018 11:59:22 AM	39981

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 4 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1808F09

Date Reported: 8/29/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services Client Sample ID: South Bottom

 Project:
 Federal F 1 Line Leak
 Collection Date: 8/23/2018 11:20:00 AM

 Lab ID:
 1808F09-005
 Matrix: SOIL
 Received Date: 8/24/2018 7:45:00 AM

PQL Qual Units Analyses Result **DF** Date Analyzed Batch **EPA METHOD 300.0: ANIONS** Analyst: MRA Chloride 8/28/2018 2:01:19 PM 40017 ND 30 mg/Kg **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: Irm 8/27/2018 6:44:35 PM Diesel Range Organics (DRO) ND 9.8 mg/Kg 39983 Motor Oil Range Organics (MRO) ND 49 mg/Kg 8/27/2018 6:44:35 PM 39983 Surr: DNOP 120 50.6-138 %Rec 8/27/2018 6:44:35 PM 39983 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 17 5.0 mg/Kg 8/27/2018 12:22:50 PM 39981 Surr: BFB 116 15-316 %Rec 1 8/27/2018 12:22:50 PM 39981 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 8/27/2018 12:22:50 PM 39981 Toluene 0.27 0.050 mg/Kg 8/27/2018 12:22:50 PM 39981 Ethylbenzene 0.13 0.050 mg/Kg 8/27/2018 12:22:50 PM 39981 Xylenes, Total 1.3 0.099 mg/Kg 8/27/2018 12:22:50 PM 39981 1 Surr: 4-Bromofluorobenzene 80-120 %Rec 8/27/2018 12:22:50 PM 39981 96.1

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 5 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1808F09

Date Reported: 8/29/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Federal F 1 Line Leak

Lab ID: 1808F09-006 Client Sample ID: South Wall

Collection Date: 8/23/2018 11:30:00 AM

Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	8/28/2018 2:13:44 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/27/2018 7:06:32 PM	39983
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/27/2018 7:06:32 PM	39983
Surr: DNOP	112	50.6-138		%Rec	1	8/27/2018 7:06:32 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/27/2018 12:46:18 PM	39981
Surr: BFB	91.9	15-316		%Rec	1	8/27/2018 12:46:18 PM	39981
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.024		mg/Kg	1	8/27/2018 12:46:18 PM	39981
Toluene	ND	0.048		mg/Kg	1	8/27/2018 12:46:18 PM	39981
Ethylbenzene	ND	0.048		mg/Kg	1	8/27/2018 12:46:18 PM	39981
Xylenes, Total	ND	0.096		mg/Kg	1	8/27/2018 12:46:18 PM	39981
Surr: 4-Bromofluorobenzene	93.3	80-120		%Rec	1	8/27/2018 12:46:18 PM	39981

Matrix: SOIL

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits Page 6 of 12 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1808F09

Date Reported: 8/29/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Federal F 1 Line Leak

1808F09-007 Lab ID:

Client Sample ID: East Wall South End

Collection Date: 8/23/2018 11:40:00 AM

Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	30		mg/Kg	20	8/28/2018 2:26:09 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/27/2018 7:28:44 PM	39983
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/27/2018 7:28:44 PM	39983
Surr: DNOP	115	50.6-138		%Rec	1	8/27/2018 7:28:44 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/27/2018 1:09:44 PM	39981
Surr: BFB	93.8	15-316		%Rec	1	8/27/2018 1:09:44 PM	39981
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.023		mg/Kg	1	8/27/2018 1:09:44 PM	39981
Toluene	ND	0.046		mg/Kg	1	8/27/2018 1:09:44 PM	39981
Ethylbenzene	ND	0.046		mg/Kg	1	8/27/2018 1:09:44 PM	39981
Xylenes, Total	ND	0.092		mg/Kg	1	8/27/2018 1:09:44 PM	39981
Surr: 4-Bromofluorobenzene	93.2	80-120		%Rec	1	8/27/2018 1:09:44 PM	39981

Matrix: SOIL

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 7 of 12 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1808F09

Date Reported: 8/29/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Federal F 1 Line Leak

Lab ID:

1808F09-008

Matrix: SOIL

Client Sample ID: West Wall South End

Collection Date: 8/23/2018 11:50:00 AM

Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual U	Jnits	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	30	n	ng/Kg	20	8/28/2018 2:38:33 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.9	n	ng/Kg	1	8/27/2018 7:50:44 PM	39983
Motor Oil Range Organics (MRO)	ND	50	n	ng/Kg	1	8/27/2018 7:50:44 PM	39983
Surr: DNOP	121	50.6-138	9	%Rec	1	8/27/2018 7:50:44 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	36	4.7	n	ng/Kg	1	8/27/2018 1:33:12 PM	39981
Surr: BFB	151	15-316	9	%Rec	1	8/27/2018 1:33:12 PM	39981
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	0.048	0.023	n	ng/Kg	1	8/27/2018 1:33:12 PM	39981
Toluene	0.72	0.047	n	ng/Kg	1	8/27/2018 1:33:12 PM	39981
Ethylbenzene	0.21	0.047	n	ng/Kg	1	8/27/2018 1:33:12 PM	39981
Xylenes, Total	1.9	0.093	n	ng/Kg	1	8/27/2018 1:33:12 PM	39981
Surr: 4-Bromofluorobenzene	101	80-120	9	%Rec	1	8/27/2018 1:33:12 PM	39981

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

- * 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
- PQL Practical Quanitative Limit
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 8 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1808F09 29-Aug-18

Client:

Williams Field Services

Project:

Federal F 1 Line Leak

Sample ID MB-40017

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 40017

1.5

RunNo: 53754

SeqNo: 1774320

Units: mg/Kg

Qual

Analyte Chloride

Result ND

Analysis Date: 8/28/2018

SPK value SPK Ref Val %REC LowLimit

TestCode: EPA Method 300.0: Anions

HighLimit

RPDLimit

Prep Date: 8/28/2018

Sample ID LCS-40017 LCSS

SampType: Ics Batch ID: 40017

RunNo: 53754

Client ID: Prep Date:

8/28/2018

Analysis Date: 8/28/2018

SeqNo: 1774322

Units: mg/Kg HighLimit

%RPD

Analyte

PQL SPK value SPK Ref Val %REC LowLimit

RPDLimit

Qual

15.00

Chloride

Result

14

1.5

0

96.3

90

110

Qualifiers:

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix D

H Holding times for preparation or analysis exceeded Not Detected at the Reporting Limit

POL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits

Page 9 of 12

P Sample pH Not In Range

RL Reporting Detection Limit Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1808F09

29-Aug-18

Client:

Williams Field Services

Project:

Federal F 1 Line Leak

Sample ID MB-39983	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: PBS	Batch	ID: 39	ID: 39983 RunNo: 53721							
Prep Date: 8/24/2018	Analysis D	ate: 8/	27/2018	S	SeqNo: 1	772381	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		116	50.6	138			
Sample ID 1808F09-001AMS	SampT	ype: MS	3	Test	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Sample ID 1808F09-001AMS Client ID: West Wall North		ype: MS			tCode: Ef		8015M/D: Die	esel Range	e Organics	
		ID: 39		R		3721	8015M/D: Die		e Organics	
Client ID: West Wall North	En Batch	ID: 39	983 27/2018	R	RunNo: 5	3721			e Organics RPDLimit	Qual
Client ID: West Wall North	En Batch Analysis D	ID: 39 9	983 27/2018	R	RunNo: 5 3 SeqNo: 1 3	3721 773142	Units: mg/K	g		Qual

Sample ID	1808F09-001AMSD	SampTy	/pe: M \$	SD	Test	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	West Wall North E	n Batch	ID: 39	983	R	RunNo: 5	3721				
Prep Date:	8/24/2018	Analysis Da	ate: 8/	27/2018	S	SeqNo: 1	773143	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	64	9.9	49.26	10.16	110	53.5	126	12.9	21.7	
Surr: DNOP		6.7		4.926		135	50.6	138	0	0	

Sample ID LCS-39983	SampTy	SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch	ID: 399	983	R	RunNo: 5	3721				
Prep Date: 8/24/2018	Analysis Da	ate: 8/	27/2018	SeqNo: 1773347 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	5.8		5.000		115	50.6	138			

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
- PQL Practical Quanitative Limit
- 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

Page 10 of 12

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1808F09

29-Aug-18

Client:

Williams Field Services

Project:

Federal F 1 Line Leak

Sample ID MB-39981	SampT	уре: МЕ	BLK	TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch	n ID: 39	981	R	unNo: 5	3734				
Prep Date: 8/24/2018	Analysis D	Date: 8/	27/2018	S	eqNo: 1	772556	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		93.6	15	316			

Sample ID LCS-39981	SampTy	pe: LC	S	lest	Code: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: LCSS	Batch I	D: 39 9	981	R	unNo: 5	3734				
Prep Date: 8/24/2018	Analysis Dat	te: 8/ 2	27/2018	S	eqNo: 1	772557	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	75.9	131			
Surr: BFB	1100		1000		106	15	316			

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
- PQL Practical Quanitative Limit
- 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

Page 11 of 12

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1808F09

29-Aug-18

Client:

Williams Field Services

Project:

Federal F 1 Line Leak

Sample ID MB-39981	SampT	уре: МЕ	BLK	Tes	tCode: El					
Client ID: PBS	Batch	n ID: 39	981	F	RunNo: 5					
Prep Date: 8/24/2018	Analysis D	Date: 8/	27/2018	S	SeqNo: 1	772586	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		96.4	80	120			

Sample ID LCS-39981	TestCode: EPA Method 8021B: Volatiles											
Client ID: LCSS	Batch	ID: 399	981	RunNo: 53734								
Prep Date: 8/24/2018	Analysis D	ate: 8/	27/2018	S	SeqNo: 1	772587	Units: mg/K	g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.93	0.025	1.000	0	93.0	77.3	128					
Toluene	0.96	0.050	1.000	0	96.2	79.2	125					
Ethylbenzene	0.96	0.050	1.000	0	96.0	80.7	127					
Xylenes, Total	2.9	0.10	3.000	0	97.6	81.6	129					
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120					

- * 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
- PQL Practical Quanitative Limit
- 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
- Page 12 of 12

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: WILLIAMS FIELD SERVI Work Order Number:	1808F09		RcptNo	: 1
Received By: Jazzmine Burkhead 8/23/2018 7:45:00 AM	high	in Buckey		
Completed By: Ashley Gallegos 8/24/2018 9:05:58 AM		AZ		
	_			
Reviewed By: JAB 08/24/18	labeled	d bu	IO	08 24 18
Chain of Custody				
1. Is Chain of Custody complete?	Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered?	Courier		4	
Log In				
3. Was an attempt made to cool the samples?	Yes 🗸	No 🗆	NA 🗆	
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🗸	No 🗌	na 🗆	
5. Sample(s) in proper container(s)?	Yes 🗹	No 🗆		
Sufficient sample volume for indicated test(s)?	Yes 🗹	No 🗌		
7. Are samples (except VOA and ONG) properly preserved?	Yes 🗸	No 🗌		
8. Was preservative added to bottles?	Yes	No 🗹	NA	
9. VOA vials have zero headspace?	Yes	No 🗌	No VOA Vials	
10. Were any sample containers received broken?	Yes	No 🗹	# of preserved	To
11. Does paperwork match bottle labels?	Yes 🗸	No 🗆	bottles checked for pH:	08 24 2018 r >12 unless noted)
(Note discrepancies on chain of custody) 12. Are matrices correctly identified on Chain of Custody?	Yes 🗸	No 🗆	Adjusted2	12 011000 110100)
13. Is it clear what analyses were requested?		No 🗆		
14. Were all holding times able to be met?	Yes 🗹	No 🗆	Checked by:	
(If no, notify customer for authorization.)		L		
Special Handling (if applicable)				
15. Was client notified of all discrepancies with this order?	Yes	No 🗌	NA 🗹	7
Person Notified: Date		SECRETARISE SOLUTIONS CONTRACTOR		
By Whom: Via:	eMail Phone	e 🗌 Fax	_ In Person	
Regarding:				
Client Instructions:			:	
16. Additional remarks:				
17. Cooler Information				
	Seal Date Sigi	пей Ву		
1 4.6 Good Yes				

Chain-of-Custody Record		Turn-Around Time: 8-28-20/8						ы	A		FI	uv	TD		NI N	4FI	NTA	AI			
Client: WFS			□ Standard □ Rush 3 day Project Name: Federal F-1 LiNe Kak															TO		ė	
				Project Name	:	1 ine beek								ronn							
Mailing	Address	1.75	5 ARROYA DR	react		2170-10-12		49	01 H									109			
Blow	om Fi			Project #:			4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107														
Bloom Field Nm 87413 Phone #: 505-632-4475			1			Analysis Request															
email o	r Fax#: !	الريان)	Hong @ williams. COM	Project Manager:				_ _ _ _ _	3					04)							
	Package:	-					8021	as o	M			(S)		,S(PCB's						
□ Stan	dard		☐ Level 4 (Full Validation)	K:JUN	HONG		32	1 (G	8			SIMS))2,P(32 P						
Accredi		□ Otho	ar.	Sampler: M	organ K.	11:04	+TMB'S (8021)	+ TPH (Gas only)	1/0	8.1	4.1)	3270		8,	8081 Pesticides / 8082		2				or N)
		- Othe	er	Sample Tem	a Variation Nel la la companya de la companya d			¥ ₩	(GR(141	d 50	o S	als	8	des		VOV	9			(Y o
	(iypo)_						MTBE	+ MTBE	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270	8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	stici	8260B (VOA)	8270 (Semi-VOA)	londe			seles
Date Time Matrix Sample Request ID		Preservative	HEALING	H +	+ ×	801	N.	Š S)s (8	SA 8) Su	1 Pe) BC	S) (S	h/4			3npp			
	37.002.71.000			Type and #	Туре	1808/109	ВТЕХ	BTEX	표	TF	EDE	PA	RCRA	Anic	808	826	827	U		Air Bubbles (Y	
8/23/18	1045	5011	North ENd	1-402	Cool	-001	X		X									X			
8/23/18	1055		North END North Bottom	1-402	1	-002	X		X									X			
\$23/18	1100	soil	North wall	1-402		-003	X		X									X			
3/23/18	1110	-	East wall south End	1-402	-	-004	X		X									X			
8/23/18			South Bottom	1-462		-005	X		X									X			
8/23/18			south wall	1-462		~006	X		χ									χ			
8/23/18	1/40	Sail	East Wall END	1-402		-007	X		X									X			
8/18	1/20	Soil	East wall END WEST wall South END	1-402	1	-008	X	*	X									X			
2//8	1150	5011	30011 2112																		
																					,
Date:	Time:	Relinquish		Received by:	\ .	Date Time	Rei	mark	s:												
8/23/18	1217	Mon	g-Killion	Received by:	walt.	8 23 1 1517 Date Time	-														
Date:	Time:	Relinquish	ned by:	Received by:	1/ 1/	, X1.	1														
8/23/18	1901	VM	omitted to Hall Environmental may be sub	MAN	Jummi	108/26/18 07		ibilita	Δηνο	uh-cor	tracto	d data	will be	e clear	ly note	ated or	n the a	nalytics	l report		
	If necessary	samples sub	omitted to Hall Environmental may be sub	contracted to lother a	ccredited laboratori	es. This serves as house of th	ia hoss	iibiiity.	CITY S	GD-0011	40181	a uaid	ATTAIN DI	- 0.001	., 1100	01		, 1100	орога		

District I
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 Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

				Police	DIC I WIT	J							
Responsible Party Harvest Midstream Company						OGRID 37388							
Contact Name Kijun Hong					Contact Telephone 505-632-4475								
Contact ema	il khong@h	arvestmidstream.c	om	Incident # NCS1825436405									
Contact mail	ing address	1755 Arroyo Dr.,	Farmington, NM										
			Location	of R	elease S	ource							
Latitude 36.6	515481		(NAD 83 in de	ecimal de	Longitude grees to 5 decim	-107.915998 nal places)							
Site Name Sr	nick Com 32	-2A			Site Type I	Pipeline on producer location							
Date Release	Discovered	8/8/2018			API# (if app	plicable)							
Unit Letter	Section	Township	Range		County								
J	32	28N	10W	San	Juan								
	Materia	Federal To	Nature an	d Vo	lume of l	justification for the volumes provided below)							
Crude Oi		Volume Release				Volume Recovered (bbls)							
□ Produced	Water		d (bbls) Unknow			Volume Recovered (bbls)							
		Is the concentrate produced water	ion of dissolved >10,000 mg/l?	chloride	in the	Yes No							
Condensa	ite	Volume Release				Volume Recovered (bbls)							
☐ Natural Gas						Volume Recovered (Mcf) 0							
Other (describe) Volume/Weight Released (provide units					Volume/Weight Recovered (provide units)								
Cause of Rel Failure of the		e to corrosion.											



State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the respo Unauthorized release of gases exceeding	nsible party consider this a major release? 500 MCF.					
19.15.29.7(A) NMAC?							
⊠ Yes □ No							
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Upon discovery, courtesy notification was given to Cry Smith and Vanessa Fields via email by Kijun Hong on 8/9/2018. When as initial gas loss calculation was determined, an update was given by email to include Jim Griswold on 8/29/2018.							
	Initial R	esponse					
The responsible p	party must undertake the following actions immediate	ly unless they could create a safety hazard that would result in injury					
☐ The source of the rele	ase has been stopped.						
☐ The impacted area has	s been secured to protect human health and	the environment.					
Released materials ha	ve been contained via the use of berms or o	likes, absorbent pads, or other containment devices.					
All free liquids and re	coverable materials have been removed an	d managed appropriately.					
If all the actions described	l above have <u>not</u> been undertaken, explain	why:					
has begun, please attach a	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred blease attach all information needed for closure evaluation.					
regulations all operators are republic health or the environmental failed to adequately investigated to adequately investigated to a second se	required to report and/or file certain release noti nent. The acceptance of a C-141 report by the C tte and remediate contamination that pose a thre	best of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws					
Printed Name: Kijun Hong	<u>g</u>	Title: Environmental Specialist					
Signature:		Date:8/31/2018					
email: _khong@harvestmi	dstream.com	Telephone:505-632-4475					
OCD Only							
Received by:		Date:					

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	95(ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	⊠ Yes □ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ⊠ No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ve contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	rtical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring we Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information Topographic/Aerial maps Laboratory data including chain of custody	lls.

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico Oil Conservation Division

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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.					
Printed Name: Kijun Hong	Title: _Environmental Specialist				
Signature: Date: II/9/2018 email: khong@harvestmidstream.com Telephone: 505-635-4475					
OCD Only					
Received by:	Date:				

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
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Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.	
A scaled site and sampling diagram as described in 19.15.29.11 NMAC	
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)	
☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)	
□ Description of remediation activities	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Kijun Hong Title: Environmental Specialist Date: LIGOLOBE Date: LIGOLOBE	
email: <u>khong@harvestmidstream.com</u> Telephone: <u>505-632-4475</u>	
OCD Only	
Received by: Date:	
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate an remediate contamination that poses a threat to growndwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.	d e
Closure Approved by: Date: 1/15/19	
Printed Name: Cory Title: Living ments Sec.	





848 East Second Avenue Durango, Colorado 81301 970.385.1096

October 31, 2018

Mr. Cory Smith New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

RE:

Request For Closure Harvest Four Corners, LLC Snick Com 32-2A Release Incident Number: NCS1825436405

San Juan County, New Mexico



Dear Mr. Smith:

On behalf of Harvest Four Corners, LLC (Harvest), LT Environmental, Inc. (LTE) presents the following letter report detailing remediation and soil sampling activities at the Snick Com 32-2A (Site) in Unit J, Section 32, Township 28 North, Range 10 West, in San Juan County, New Mexico (Figure 1). The purpose of the excavation and soil sampling activities was to address impacts to soil after an unknown amount of produced water and approximately 503 thousand cubic feet (MCF) of natural gas were released from a gathering pipeline on the Mustang Resources, LLC Snick Com 32 #002A well pad. The release was discovered on August 8, 2018. Upon discovery, the section of pipe was isolated and blown down. Williams Four Corners LLC (Williams) reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Attachment 1) on August 31, 2018. On October 1, 2018, Williams assets were purchased by Harvest who is proceeding with remediation and closure of the release. Based on the initial response efforts and the results of the confirmation soil sampling, Harvest is requesting no further action for this release event.

BACKGROUND

The final site characterization occurred after August 14, 2018; therefore, LTE applied Table 1, the Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC) to determine remediation action levels. Depth to groundwater at the Site is estimated to be between 50 feet and 100 feet below ground surface (bgs) based on the nearest water well data and known aquifer properties. The nearest permitted water well, SJ 00032, is located approximately 1.48 miles south of the Site, with a depth to groundwater of 60 feet bgs and a total depth of 235 feet bgs. The water well is approximately 35 feet lower in elevation than the Site. The closest continuously flowing water or significant watercourse to the Site is a first order tributary to an unnamed arroyo located approximately 265 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital,





institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within an unstable area, 100-year floodplain, or overlying a subsurface mine. Based on these criteria, the following NMOCD Table 1 closure criteria apply:

Benzene	10 milligrams per kilogram (mg/kg)
Total benzene, toluene, ethylbenzene, and total xylenes (BTEX)	50 mg/kg
Total petroleum hydrocarbons (TPH)	100 mg/kg
Chloride	600 mg/kg

EXCAVATION ACTIVITIES

On September 4, 2018, Harvest excavated impacted soil. The final excavation extent was approximately 250 square feet in area and extended to 8 feet bgs. The lateral extent of the remediation footprint was approximately 25 feet by 10 feet and is illustrated on Figure 2. Approximately 48 cubic yards of impacted soil were removed using a backhoe. Impacted soil was transported and properly disposed of at the Envirotech Landfarm #2 Facility in Bloomfield, New Mexico. Photographs of the final excavation extent are included as Attachment 2.

SOIL SAMPLING

Following the removal of impacted soil, Harvest collected a 5-point composite soil sample from the sidewall and a 5-point composite soil sample from the floor of the excavation to document removal of impacted soil. Soil sample locations are depicted on Figure 2. The samples were shipped to Hall Environmental Laboratories in Albuquerque, New Mexico, under strict chain-of-custody procedures for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) by EPA Method 8015M, and chloride by EPA Method 300.0.

ANALYTICAL RESULTS

Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were compliant with NMOCD Table 1 closure criteria in all soil samples. Chloride and total TPH concentrations were below laboratory detection limit in both samples. BTEX concentrations ranged from below the laboratory detection limit in the floor sample and 0.48 mg/kg in the wall sample. Laboratory analytical results are summarized in Table 1. Complete laboratory analytical reports are included as Attachment 3.





CONCLUSIONS

Approximately 48 cubic yards of impacted soil were excavated from the release footprint, and laboratory analytical results of confirmation soil samples indicated compliance with NMOCD Table 1 closure criteria. Following the receipt of soil sample laboratory analytical results, the excavation area was backfilled with clean imported fill material to match the pre-existing grade. Based on the data collected, Harvest is requesting closure of this release per NMAC rule 19.15.29.12 Amended August 2018.

If you have any questions or comments, please do not hesitate to contact Brooke Herb at (970) 385-1096 or bherb@ltenv.com.

Sincerely,

LT ENVIRONMENTAL, INC.

Brooke Herb

Project Geologist

Ashley L. Ager, M.S., P.G.

Senior Geologist

ashley L. ager

cc:

Vanessa Fields, NMOCD Jim Griswold, NMOCD

Whitney Thomas, BLM

Attachments:

Figure 1

Site Location Map

Figure 2

Soil Sample Locations

Table 1

Soil Analytical Results

Attachment 1

Initial/Final NMOCD Form C-141

Attachment 2

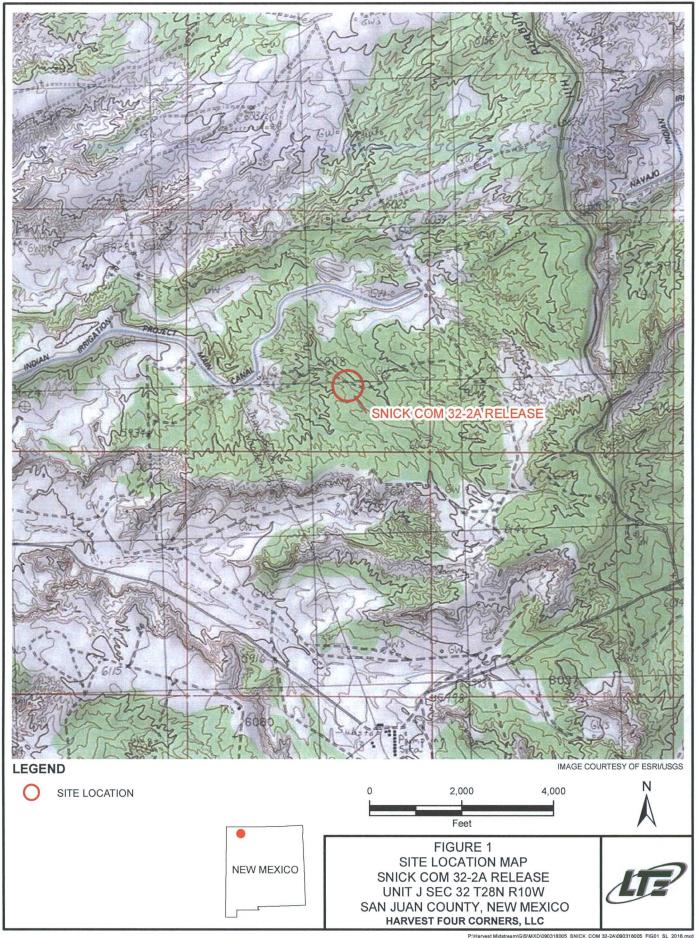
Photographic Log

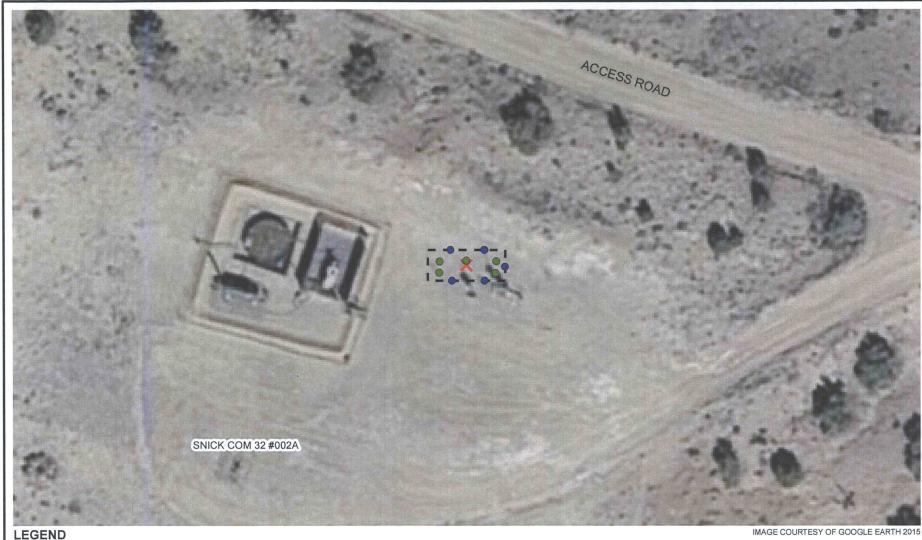
Attachment 3

Laboratory Analytical Report









- RELEASE LOCATION
- COMPOSITE FLOOR SAMPLE ALIQUOT
- COMPOSITE SIDEWALL SAMPLE ALIQUOT

EXCAVATION EXTENT (25' X 10')

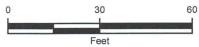




FIGURE 2 SOIL SAMPLE LOCATIONS SNICK COM 32-2A RELEASE UNIT J SEC 32 T28N R10W SAN JUAN COUNTY, NEW MEXICO HARVEST FOUR CORNERS, LLC





TABLE 1 SOIL ANALYTICAL RESULTS

SNICK COM 32-2A RELEASE SAN JUAN COUNTY, NEW MEXICO HARVEST FOUR CORNERS, LLC

Sample Name	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
Snick Com 32-2A Floor	9/4/2018	<0.10	<0.21	<0.21	<0.42	<0.42	<21	<9.8	<49	<49	<30
Snick Com 32-2A Side Wall	9/4/2018	<0.09	0.26	<0.18	0.48	0.74	<18	<9.8	<49	<49	<30
NMOCD Table 1 Closure Criteria		10	NE	NE	NE	50	NE	NE	NE	100	600

Notes:

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

NE - not established

Table 1 - Closure Criteria for Soils Impacted by a Release per 19.15.29 August 2018

< - indicates result is below laboratory detection limit





District I
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 Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

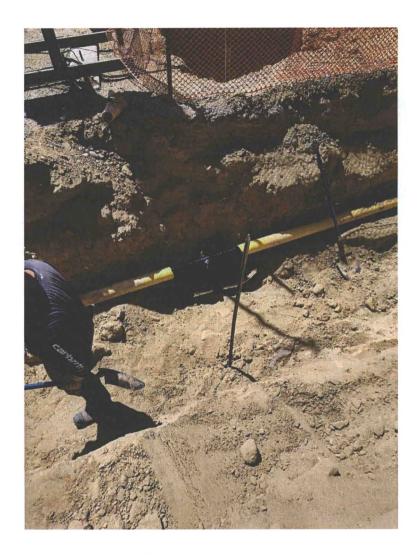
Responsible Party Williams Four Corners LLC				OGRID 37388				
Contact Name Kijun Hong				Contact Telephone (505) 632-4475				
Contact emai	l kijun.hong	@williams.com			Incident # A	CS1825436405		
Contact mail	ing address	1755 Arroyo Dr.,	Farmington, NN	I 8741	3			
			Location	of R	elease So	urce		
Latitude3	86.615481					-107.915998		
			(NAD 83 in dec	imal de	grees to 5 decim	ıl places)		
Site Name Si	nick Com 32	-2A			Site Type	ipeline on producer location		
Date Release	Discovered	8/8/2018			API# (if appl	cable)		
Unit Letter	Section	Township	Range		Coun			
J	32	28N	10W		San Ju	an		
Surface Owne	r: State	🚺 Federal 🔲 Tr	ibal Private (A			 Kelease)	
	Motorio	ol(a) Palassad (Salast a	Il that apply and attach	calcula	tions or specific	ustification for the volumes provided b	nelow)	
Crude Oi		Volume Released		Carcura	cions or specific	Volume Recovered (bbls)	10.011)	
N Produced	Water	Volume Release	d (bbls) Unknown	n at th	is time	Volume Recovered (bbls) Remediation in progress		
		COURT MANY AS AS ASSESSMENT OF THE PARTY OF	ion of total dissolv water >10,000 mg/		ids (TDS)	Yes No		
Condensa	ite	Volume Release				Volume Recovered (bbls)		
Natural C	as	Volume Release	d (Mcf) 503			Volume Recovered (Mcf) 0		
Other (describe) Volume/Weight Released (provide units))	Volume/Weight Recovered (p	provide units)			
Cause of Rel	ease	1						
Failure of p	peline due t	o corrosion.						

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

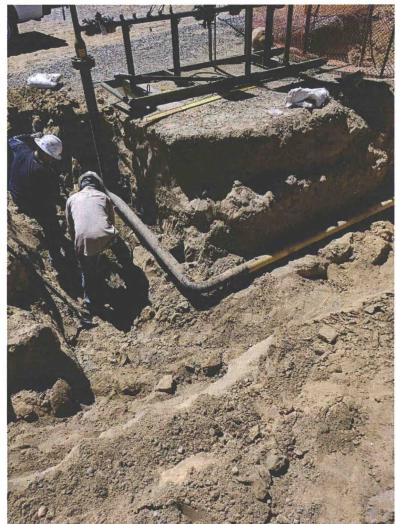
Was this a major release as defined by	If YES, for what reason(s) does the respons	
19.15.29.7(A) NMAC?	Unauthorized release of gases exceeding	500 MCF
Yes No		
If YES, was immediate no	otice given to the OCD? By whom? To who	m? When and by what means (phone, email, etc)?
Upon discovery, courtes initial gas loss calculation	y notification was given to Cory Smith and n was determined, an update was given by	Vanessa Fields via email by Kijun Hong on 8/9/2018. When an email to include Jim Griswold on 8/29/2018.
	Initial Re	sponse
The responsible	party must undertake the following actions immediately	unless they could create a safety hazard that would result in injury
The source of the release	ase has been stopped.	
	s been secured to protect human health and the	e environment.
Released materials have	ve been contained via the use of berms or dik	es, absorbent pads, or other containment devices.
X All free liquids and re	coverable materials have been removed and	managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain w	hy:
has begun, please attach	a narrative of actions to date. If remedial e	emediation immediately after discovery of a release. If remediation fforts have been successfully completed or if the release occurred
*		ease attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain release notifi- ment. The acceptance of a C-141 report by the Od- ate and remediate contamination that pose a threa	est of my knowledge and understand that pursuant to OCD rules and cations and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have to groundwater, surface water, human health or the environment. In esponsibility for compliance with any other federal, state, or local laws
Printed Name: Kijun	Hong	Title: Environmental Specialist
Signature:		Date:8/31/2018
email: kijun.hong	@williams.com	Telephone:
OCD Only		
Received by:		Date:





View of release point in excavation

	How sort Four Corners IIC	
Project: 090318005	Harvest Four Corners, LLC Snick Com 32-2A Release	
September 4, 2018	Photographic Log	Advancing Opportunity



View east of the excavation

Project: 090318005	Harvest Four Corners, LLC Snick Com 32-2A Release	LE
September 4, 2018	Photographic Log	Advancing Opportunity





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

September 11, 2018

Kijun Hong Williams Field Services 188 Co. Rd 4900 Bloomfield, NM 87413 TEL: FAX

RE: Snick Com 32-2A

OrderNo.: 1809065

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/5/2018 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Only

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1809065

Date Reported: 9/11/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Snick Com 32-2A

Lab ID: 1809065-001

Client Sample ID: Snick Com 32-2A Floor

Collection Date: 9/4/2018 1:55:00 PM

Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	9/5/2018 10:54:58 AM	40145
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	9/5/2018 9:47:13 AM	40144
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/5/2018 9:47:13 AM	40144
Surr: DNOP	103	50.6-138	%Rec	1	9/5/2018 9:47:13 AM	40144
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	21	mg/Kg	5	9/5/2018 10:21:10 AM	G53917
Surr: BFB	94.0	15-316	%Rec	5	9/5/2018 10:21:10 AM	G53917
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.10	mg/Kg	5	9/5/2018 10:21:10 AM	B53917
Toluene	ND	0.21	mg/Kg	5	9/5/2018 10:21:10 AM	B53917
Ethylbenzene	ND	0.21	mg/Kg	5	9/5/2018 10:21:10 AM	B53917
Xylenes, Total	ND	0.42	mg/Kg	5	9/5/2018 10:21:10 AM	B53917
Surr: 4-Bromofluorobenzene	90.0	80-120	%Rec	5	9/5/2018 10:21:10 AM	B53917

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 6 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1809065

Date Reported: 9/11/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Client Sample ID: Snick Com 32-2A Side Wall

Project:

Snick Com 32-2A

Collection Date: 9/4/2018 1:50:00 PM

Lab ID:

1809065-002

Matrix: SOIL

Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual U	nits I	F	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30	m	g/Kg	20	9/5/2018 11:07:23 AM	40145
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	Irm
Diesel Range Organics (DRO)	ND	9.8	m	g/Kg	1	9/5/2018 10:11:31 AM	40144
Motor Oil Range Organics (MRO)	ND	49	m	g/Kg	1	9/5/2018 10:11:31 AM	40144
Surr: DNOP	91.0	50.6-138	%	Rec	1	9/5/2018 10:11:31 AM	40144
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	18	m	g/Kg	5	9/5/2018 10:44:28 AM	G53917
Surr: BFB	96.3	15-316	%	Rec	5	9/5/2018 10:44:28 AM	G53917
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.090	m	g/Kg	5	9/5/2018 10:44:28 AM	B53917
Toluene	0.26	0.18	m	g/Kg	5	9/5/2018 10:44:28 AM	B53917
Ethylbenzene	ND	0.18	m	g/Kg	5	9/5/2018 10:44:28 AM	B53917
Xylenes, Total	0.48	0.36	m	g/Kg	5	9/5/2018 10:44:28 AM	B53917
Surr: 4-Bromofluorobenzene	88.6	80-120	%	Rec	5	9/5/2018 10:44:28 AM	B53917

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits Page 2 of 6 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809065

11-Sep-18

Client:

Williams Field Services

Project:

Snick Com 32-2A

Sample ID MB-40145

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 40145

RunNo: 53927

Prep Date: 9/5/2018

Analysis Date: 9/5/2018

SeqNo: 1781197

Units: mg/Kg

Analyte Chloride

Result ND PQL SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit** Qual

Sample ID LCS-40145

Client ID: LCSS

SampType: Ics

RunNo: 53927

HighLimit

Units: mg/Kg

Prep Date: Analyte

9/5/2018

Analysis Date: 9/5/2018

SeqNo: 1781198

SPK value SPK Ref Val %REC

Result 14

90

%RPD **RPDLimit** Qual

Chloride

1.5

1.5

Batch ID: 40145

PQL

15.00

94.4

110

LowLimit

TestCode: EPA Method 300.0: Anions

Qualifiers:

H

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D

PQL Practical Quanitative Limit

- ND Not Detected at the Reporting Limit
- % Recovery outside of range due to dilution or matrix

Holding times for preparation or analysis exceeded

- Analyte detected in the associated Method Blank
- E Value above quantitation range
- J P Sample pH Not In Range
- RL Reporting Detection Limit Sample container temperature is out of limit as specified
- Analyte detected below quantitation limits Page 3 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809065

11-Sep-18

Client:

Williams Field Services

Project:

Snick Com 32-2A

Troject. Sinck Co	3111 32-2A		
Sample ID MB-40144	SampType: MBLK	TestCode: EPA Method 8	015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 40144	RunNo: 53915	
Prep Date: 9/5/2018	Analysis Date: 9/5/2018	SeqNo: 1779402	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND 10		
Motor Oil Range Organics (MRO)	ND 50		
Surr: DNOP	11 10.00	106 50.6	138
Sample ID LCS-40144	SampType: LCS	TestCode: EPA Method 8	015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 40144	RunNo: 53915	
Prep Date: 9/5/2018	Analysis Date: 9/5/2018	SeqNo: 1779424	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	48 10 50.00	0 95.8 70	130
Surr: DNOP	4.8 5.000	96.2 50.6	138
Sample ID MB-40111	SampType: MBLK	TestCode: EPA Method 8	015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 40111	RunNo: 53915	
Prep Date: 9/4/2018	Analysis Date: 9/5/2018	SeqNo: 1780862	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	11 10.00	110 50.6	138
Sample ID LCS-40111	SampType: LCS	TestCode: EPA Method 8	015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 40111	RunNo: 53915	
Prep Date: 9/4/2018	Analysis Date: 9/5/2018	SeqNo: 1780884	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	5.6 5.000	113 50.6	138

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
- PQL Practical Quanitative Limit
- 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

Page 4 of 6

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809065 11-Sep-18

Client:

Williams Field Services

Project:

Snick Com 32-2A

Sample ID R	RB	SampTyp	e: ME	BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: P	PBS	Batch II	D: G 5	3917	F	RunNo:	53917				
Prep Date:		Analysis Dat	e: 9 /	5/2018	5	SeqNo: 1	1780252	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range (Organics (GRO)	ND	5.0								
Surr: BFB	, ,	930		1000		92.8	15	316			
Sample ID 2	2.5UG GRO LCS	SampTyp	e: LC	s	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: L	.css	Batch II	D: G 5	3917	F	RunNo:	3917				
Prep Date:		Analysis Dat	e: 9 /	5/2018	SeqNo: 1780253			Units: mg/Kg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range (Organics (GRO)	27	5.0	25.00	0	107	75.9	131			
Surr: BFB		1000		1000		100	15	316			
Sample ID N	/IB-40113	SampTyp	e: ME	BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	е	
Client ID: P	PBS	Batch II	D: 40	113	F	RunNo:	53917				
Prep Date:	9/4/2018	Analysis Dat	e: 9 /	5/2018	8	SeqNo: 1	1780256	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		960		1000		95.7	15	316			

CS-40113

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 40113

RunNo: 53917

Prep Date: 9/4/2018

SeqNo: 1780257

Units: %Rec

Analyte

Analysis Date: 9/5/2018

Result

SPK value SPK Ref Val %REC LowLimit HighLimit

RPDLimit Qual

Surr: BFB

1000

1000

104

316

%RPD

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- Page 5 of 6

- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809065

11-Sep-18

Williams Field Services Client: Project: Snick Com 32-2A

Sample ID RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Batch ID: **B53917** Client ID: PBS RunNo: 53917 Prep Date: Analysis Date: 9/5/2018 SeqNo: 1780290 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 Toluene ND 0.050 Ethylbenzene 0.050 ND Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 0.88 1.000 88.0 80 120

Sample ID 100NG BTEX LC	Test	tCode: El	PA Method	8021B: Volat	tiles					
Client ID: LCSS	R	RunNo: 5	3917							
Prep Date:	Analysis D	ate: 9/	5/2018	S	SeqNo: 1	780291	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	84.4	77.3	128			
Toluene	0.87	0.050	1.000	0	86.7	79.2	125			
Ethylbenzene	0.85	0.050	1.000	0	85.2	80.7	127			
Xylenes, Total	2.6	0.10	3.000	0	87.2	81.6	129			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.4	80	120			

Sample ID MB-40113	SampTyp	e: MB	LK	Test	tCode: I	EPA Method	8021B: Volat	iles		
Client ID: PBS	Batch II	D: 401	113	R	RunNo:	53917				
Prep Date: 9/4/2018	Analysis Date	e: 9/5	5/2018	S	SeqNo:	1780294	Units: %Rec	:		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.92		1.000		92.0	80	120			

Sample ID LCS-40113	SampT	s	Tes	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch	ID: 40	113	F	RunNo: 5	3917				
Prep Date: 9/4/2018	Analysis D	ate: 9/	5/2018	8	SeqNo: 1	1780295	Units: %Re	C		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		93.1	80	120			

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% 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

Page 6 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified



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

Sample Log-In Check List

Client Name: WILLIAM	S FIELD SERVI	Work Order Number	: 1809065		RcptNo	1
Received By: Anne Th		9/5/2018 7:00:00 AM		Aone St-		
Reviewed By: Labeled by:	9	9/5/2018 7:32:01 AM しっちしく		Ame St-		4
Chain of Custody						
1. Is Chain of Custody com	plete?		Yes 🗸	No 🗌	Not Present	
2. How was the sample deli	ivered?		Courier			
Log In						
3. Was an attempt made to	cool the samples?		Yes 🗹	No 🗀	NA 🗆	
4. Were all samples receive	d at a temperature of	>0° C to 6.0°C	Yes 🗸	No 🗆	NA 🗆	
5. Sample(s) in proper conta	ainer(s)?		Yes 🗸	No 🗌		
6. Sufficient sample volume	for indicated test(s)?		Yes 🗸	No 🗌		
7. Are samples (except VOA	and ONG) properly	preserved?	Yes 🗸	No 🗆	*	1
8. Was preservative added t	o bottles?		Yes	No 🗸	NA \square	
9. VOA vials have zero head	Ispace?		Yes	No 🗌	No VOA Vials	
Were any sample contain	ers received broken?		Yes	No 🗹	# -5	
11. Does paperwork match bo	ottle labels?		Yes 🗸	No 🗆	# of preserved bottles checked for pH:	
(Note discrepancies on ch						>12 unless noted)
12. Are matrices correctly idea	ntified on Chain of Cu	stody?	Yes 🗹	No 🗌	Adjusted?	
13. Is it clear what analyses w			Yes 🗸	No 🗌		
 Were all holding times able (If no, notify customer for all the control of the customer) 			Yes 🗸	No 🗔	Checked by:	
Special Handling (if ap	plicable)	3				
15. Was client notified of all o		s order?	Yes	No 🗆	NA 🗹	
Person Notified:		Date	ANNUAL PRODUCT ORDER OF THE PRODUCTION OF	AUTHORISE NEW COMPANIES AND THE SPECIAL SPECIA		
By Whom:		Via:	eMail 🗌	Phone Fax	☐ In Person	
Regarding:						
Client Instructions:						
16. Additional remarks:						
17. Cooler Information			option and the second			
Cooler No Temp *C		Intact Seal No. 13	eal Date	Signed By		
3 1.3	Good Yes					

Client:	WFS		ustody Record	Turn-Around □ Standard Project Name	☑ Rush	9:5	- 18				A	N.		YS	SIS	S L	A	30		NT		
Mailing ———	Address	1755	- ARROYO DR.		C6M32	-2A			490	01 H	awki								7109			
B100	MFIC	ild N	m 874/3	Project #:							5-34							-410				
		- 632									1550		A	naly	sis	Req	ues	t		Tayle.		
			Hong @ williams. con	Project Mana	iger:			£:	(yluc	RO					040	S						
□ Stan	Package:		☐ Level 4 (Full Validation)	Vilual	Hane			TAMB's (8021)	sas (N/ C			SIMS)		04,8	PCB's						
Accred			E LOVOI 1 (1 dil Valladiloli)	Sampler: 40	man Ki	11:60		SE SE) H	DR(ls o		D ₂ ,P							
□ NEL		□ Othe	er	Sampler: me	X Yes	∏ No see		+	片	00	18.1	04.1	827)3,N(/ 80		(A	*	9	,	. Z
	(Type)	8		Sample Tem	perature 2.3	eds his	13	MTBE	H	9	bd 4	pd 5	0 or	stals	N,	ides	4)	-\0	3			رح ٥
Date	Time	Matrix	Sample Request ID	Container Type and # Mco H kds	Preservative Type	FIEA	Minister of the Control of the Contr	+ EX +	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	- Hlorida			Air Bubbles (Y or N)
9/4/18	1:55	50:1	SNick com 32-2A Floor	1-402	Cool	HEQUOREOL	-001	Х	-	X	-	<u>"</u>	11	IL.	Q	8	8	80	×	+	+	_ <
14/8		Soil		1-402	√		702	X		X									X	\pm		
									4	_	\dashv	_	_							_		<u> </u>
					***************************************				\dashv	\dashv	\dashv	_	_	_		_				_		
									\dashv	4	_	1	_	_	_	_			\perp			1
_								-	_	\dashv	_	4	\dashv							\perp	\bot	\perp
								_	\dashv	_	_	+	\dashv	_	_	_			\dashv	\perp	_	44
									-			+	\dashv	\dashv	\dashv	-			4	+	+	\perp
								\dashv	-	-		+	+	\dashv		\dashv	\dashv	\dashv	\dashv	+	+	+
							-	-	\dashv	\dashv	\dashv	+	-	-	_	-			_	_	+	\perp
								\dashv	\dashv	\dashv	+	+	+	\dashv	\dashv	-	-	-	\dashv	+	+	+
Date:	Time:	Relinquishe	Killion /	700000	Saeta	Date 9/4/18	1458	Rem	arks	:												
Date:	1917	Relinquishe	der Work	- Carlotte Company	m 2	Date 09/05/0	0															
lf	necessary,	samples subn	nitted to Hall Environmental may be subc	ontracted to other ac	credited laboratories	s. This serves a	as notice of this	possibi	lity. A	ny sub	o-contra	acted (data w	itl be	clearly	notate	ed on	the an	alytical	report.		

District I
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

Responsible Party

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Harvest Four Corners, LLC

OGRID

Contact Nam	ne	Kijun Hong		Contact Te	lephone	(505) 632-4475					
Contact ema	il	khong@harvest	midstream.com	Incident # (Incident # (assigned by OCD)						
Contact mail	ing address	1755 Arroyo Dr	., Farmington, NM 874	113							
Latitude		36.449293	Location of R	Longitude _	-107	7.392803					
Site Name	Lateral H-8	3		Site Type	Pipeline						
Date Release	Discovered	11/29/2018		API# (if appl	icable)						
Unit Letter	Section 31	Township 26N	Range 5W	Count San Ju							
Surface Owner			ibal ⊠ Private (Name: Nature and Vo	lume of R		olumes provided below)					
Crude Oil	l	Volume Release			Volume Recove						
Produced	Water	Volume Release	d (bbls) 0.24		Volume Recove	red (bbls)					
		Is the concentrat	ion of dissolved chloride >10,000 mg/l?	e in the	Yes No						
Condensa	te	Volume Release			Volume Recove	red (bbls)					
Natural G	as	Volume Release	d (Mcf) 22.97		Volume Recove	red (Mcf) 0					
Other (des	scribe)	Volume/Weight	Released (provide units))	Volume/Weight	Recovered (provide units)					
Cause of Rele	ease										
Pipeline failu	are due to c	orrosion.			-111 1	JISTRIC					
					1 2018	DEC 5					



State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the	e responsible par	rty consider this a major release?
19.15.29.7(A) NMAC?	May with reasonable probability	reach a watero	course. Possible ground water impacts.
⊠ Yes □ No			
If YES, was immediate no	otice given to the OCD? By whom?	To whom? Wh	nen and by what means (phone, email, etc)?
	poke with Vanessa Fields via phon Griswold (OCD) by email on 11/3		3 @ 7:35PM. Kijun Hong notified Cory Smith, 4PM.
	Init	ial Respons	se
The responsible p	party must undertake the following actions im	nmediately unless the	ey could create a safety hazard that would result in injury
☐ The source of the rele	ase has been stopped.		
_	s been secured to protect human hea	lth and the envir	conment.
Released materials ha	ve been contained via the use of ber	ms or dikes, abso	orbent pads, or other containment devices.
	coverable materials have been remo	ved and manage	ed appropriately.
If all the actions described	l above have <u>not</u> been undertaken, e	xplain why:	
has begun, please attach a	a narrative of actions to date. If rer	nedial efforts ha	on immediately after discovery of a release. If remediation are been successfully completed or if the release occurred ach all information needed for closure evaluation.
regulations all operators are republic health or the environmental failed to adequately investigated	required to report and/or file certain rele- nent. The acceptance of a C-141 report to the and remediate contamination that pos-	ase notifications as by the OCD does r se a threat to groun	knowledge and understand that pursuant to OCD rules and and perform corrective actions for releases which may endanger not relieve the operator of liability should their operations have adwater, surface water, human health or the environment. In allity for compliance with any other federal, state, or local laws
Printed Name: Kiju	n Hong	Title:	Environmental Specialist
Signature:	16-16 ·	Date:	12/17/2018
email: khong@harves	stmidstream.com	Telephone:	505-436-8457
OCD Only Received by:	y Smith	Date:	1/3/19



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

December 10, 2018

Kijun Hong

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX

RE: Lateral H 8

OrderNo.: 1812374

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/7/2018 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1812374

Date Reported: 12/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: North Wall Composite

Project:

Lateral H 8

Collection Date: 12/6/2018 10:00:00 AM

Lab ID:

1812374-001

Matrix: SOIL

Received Date: 12/7/2018 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	43	30		mg/Kg	20	12/7/2018 11:26:35 AM	41969
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS					Analyst	Irm
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/7/2018 11:08:00 AM	41962
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/7/2018 11:08:00 AM	41962
Surr: DNOP	93.2	50.6-138		%Rec	1	12/7/2018 11:08:00 AM	41962
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	12/7/2018 10:26:38 AM	41948
Surr: BFB	101	73.8-119		%Rec	1	12/7/2018 10:26:38 AM	41948
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.016		mg/Kg	1	12/7/2018 10:26:38 AM	41948
Toluene	ND	0.031		mg/Kg	1	12/7/2018 10:26:38 AM	41948
Ethylbenzene	ND	0.031		mg/Kg	1	12/7/2018 10:26:38 AM	41948
Xylenes, Total	ND	0.062		mg/Kg	1	12/7/2018 10:26:38 AM	41948
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	12/7/2018 10:26:38 AM	41948

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 8 J
- Sample pH Not In Range P
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1812374

Date Reported: 12/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Project: Lateral H 8

Lab ID: 1812374-002

Client Sample ID: West Wall Composite

Collection Date: 12/6/2018 10:10:00 AM

Received Date: 12/7/2018 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	30		mg/Kg	20	12/7/2018 11:38:59 AM	41969
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/7/2018 11:29:54 AM	41962
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/7/2018 11:29:54 AM	41962
Surr: DNOP	95.4	50.6-138		%Rec	1	12/7/2018 11:29:54 AM	41962
PA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	12/7/2018 10:50:11 AM	41948
Surr: BFB	94.7	73.8-119		%Rec	1	12/7/2018 10:50:11 AM	41948
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.015		mg/Kg	1	12/7/2018 10:50:11 AM	41948
Toluene	ND	0.030		mg/Kg	1	12/7/2018 10:50:11 AM	41948
Ethylbenzene	ND	0.030		mg/Kg	1	12/7/2018 10:50:11 AM	41948
Xylenes, Total	ND	0.060		mg/Kg	1	12/7/2018 10:50:11 AM	41948
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	12/7/2018 10:50:11 AM	41948

Matrix: SOIL

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

- 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
- PQL Practical Quanitative Limit
- 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 Page 2 of 8
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812374

Date Reported: 12/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: South Wall Composite

Project: Lateral H 8

Collection Date: 12/6/2018 10:20:00 AM

Lab ID: 1812374-003

Matrix: SOIL

Received Date: 12/7/2018 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS		1				Analyst:	MRA
Chloride	30	30		mg/Kg	20	12/7/2018 11:51:24 AM	41969
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/7/2018 11:52:04 AM	41962
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/7/2018 11:52:04 AM	41962
Surr: DNOP	99.1	50.6-138		%Rec	1	12/7/2018 11:52:04 AM	41962
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	2.9		mg/Kg	1	12/7/2018 11:13:47 AM	41948
Surr: BFB	93.1	73.8-119		%Rec	1	12/7/2018 11:13:47 AM	41948
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.015		mg/Kg	1	12/7/2018 11:13:47 AM	41948
Toluene	ND	0.029		mg/Kg	1	12/7/2018 11:13:47 AM	41948
Ethylbenzene	ND	0.029		mg/Kg	1	12/7/2018 11:13:47 AM	41948
Xylenes, Total	ND	0.059		mg/Kg	1	12/7/2018 11:13:47 AM	41948
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	12/7/2018 11:13:47 AM	41948

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

- 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
- PQL Practical Quanitative Limit
- 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 Page 3 of 8
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812374

Date Reported: 12/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: East Wall Composite

Project: Lateral H 8

Collection Date: 12/6/2018 10:30:00 AM

Lab ID: 1812374-004

Matrix: SOIL

Received Date: 12/7/2018 9:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	200	30	mg/Kg	20	12/7/2018 12:03:48 PM	41969
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst	Irm
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	12/7/2018 12:13:55 PM	41962
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	12/7/2018 12:13:55 PM	41962
Surr: DNOP	92.8	50.6-138	%Rec	1	12/7/2018 12:13:55 PM	41962
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.2	mg/Kg	1	12/7/2018 11:37:28 AM	41948
Surr: BFB	95.6	73.8-119	%Rec	1	12/7/2018 11:37:28 AM	41948
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.016	mg/Kg	1	12/7/2018 11:37:28 AM	41948
Toluene	ND	0.032	mg/Kg	1	12/7/2018 11:37:28 AM	41948
Ethylbenzene	ND	0.032	mg/Kg	1	12/7/2018 11:37:28 AM	41948
Xylenes, Total	ND	0.064	mg/Kg	1	12/7/2018 11:37:28 AM	41948
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	12/7/2018 11:37:28 AM	41948

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 8 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812374

10-Dec-18

Client:

Harvest

Project:

Lateral H 8

Sample ID MB-41969

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 41969

RunNo: 56164

Prep Date: 12/7/2018

Analysis Date: 12/7/2018

SeqNo: 1877391

%REC LowLimit

Units: mg/Kg

HighLimit

RPDLimit

%RPD

%RPD

Qual

Analyte Chloride

Result PQL

ND 1.5

Sample ID LCS-41969

SampType: Ics

TestCode: EPA Method 300.0: Anions

Client ID:

LCSS

Batch ID: 41969

RunNo: 56164

%REC

Prep Date:

12/7/2018

Analysis Date: 12/7/2018

SeqNo: 1877392

LowLimit

Units: mg/Kg

RPDLimit Qual

Analyte

Result

14

SPK value SPK Ref Val

HighLimit 110

PQL SPK value SPK Ref Val Chloride 1.5

15.00 94.0

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit
- **PQL** Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits

Page 5 of 8

- P Sample pH Not In Range
- RLReporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812374

10-Dec-18

Client:

Harvest

Project:

Lateral H 8

Sample ID LCS-41962	SampType: L	cs	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 4	Batch ID: 41962 RunNo: 56137								
Prep Date: 12/7/2018	Analysis Date:	2/7/2018	S	SeqNo: 1	876105	Units: mg/h	(g			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	49 10	50.00	0	98.4	70	130				
Surr: DNOP	4.2	5.000		84.7	50.6	138				

Sample ID MB-41962	SampT	ype: ME	BLK	Tes	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch	ID: 41	962	F	RunNo: 5	6137					
Prep Date: 12/7/2018	Analysis D	ate: 12	2/7/2018	S	SeqNo: 1	876106	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	10		10.00		100	50.6	138				

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

PQL Practical Quanitative Limit

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

Page 6 of 8

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812374

10-Dec-18

Client:

Harvest

Project:

Lateral H 8

Sample ID MB-41948	SampT	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch	Batch ID: 41948 RunNo: 56167								
Prep Date: 12/6/2018	Analysis D	ate: 12	2/7/2018	S	SeqNo: 1	876979	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.1	73.8	119			

Sample ID LCS-41948	SampT	ype: LC	s	Tes	tCode: E					
Client ID: LCSS	Batch	ID: 41	948	R						
Prep Date: 12/6/2018	Analysis Da	ate: 12	2/7/2018	S	SeqNo: 1	876980	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	80.1	123			
Surr: BFB	1100		1000		108	73.8	119			

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
- PQL Practical Quanitative Limit
- 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

Page 7 of 8

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812374

10-Dec-18

Client:

Harvest

Project:

Lateral H 8

Sample ID MB-41948	Samp	SampType: MBLK TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batc	h ID: 41	948	F	RunNo: 5	6167				
Prep Date: 12/6/2018	Analysis [Date: 12	2/7/2018	5	SeqNo: 1	876984	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			
Sample ID LCS-41948	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	n ID: 419	948	F	RunNo: 5	6167				
Prep Date: 12/6/2018	Analysis F	ate: 12	17/2018	c	SeaNo: 4	97600E	Unite: mall	_		

Client ID: LCSS	Batc	h ID: 41	948	F	6167					
Prep Date: 12/6/2018	Analysis D	Date: 12	2/7/2018	S	SeqNo: 1	876985	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.0	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	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
- PQL Practical Quanitative Limit
- 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

Page 8 of 8

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Harvest	Work Order Nun	nber: 1812374		ReptNo	: 1
Received By: Anne Thorne	12/7/2018 9:00:00	АМ	an N		
Completed By: Anne Thorne	12/7/2018 9:03:13		Avne H-		
Reviewed By: ENM		AW	Clone An	-	
1 2 6 2	12/7/18				
Calded by : AT 12/07/19			*		
Chain of Custody					
Is Chain of Custody complete?		Yes 🗹	No L	Not Present	
How was the sample delivered?		Courier			
Log In					
3. Was an attempt made to cool the samples	s?	Yes 🗸	No 🗆	NA 🗌	
4. Were all samples received at a temperatur	re of >0° C to 6.0°C	Yes 🗸	No 🗌	NA 🗌	
<i>5</i> • • • • • • • • • • • • • • • • • • •					
5. Sample(s) in proper container(s)?		Yes 🗸	No 🗀		
6. Sufficient sample volume for indicated test	(e)2	Yes 🗸	No 🗌		
7. Are samples (except VOA and ONG) prope			No 🗆		
8. Was preservative added to bottles?	eny preserved?				
o. Was preservative added to bottles?		Yes 🖂	No 🗸	NA 🗔	
9. VOA vials have zero headspace?		Yes	No 🗌	No VOA Vials	
10. Were any sample containers received brok	ken?	Yes	No 🗸		
				# of preserved bottles checked	
11. Does paperwork match bottle labels?		Yes 🗹	No 🗆	for pH:	
(Note discrepancies on chain of custody)	20 W 20 2				>12 unless noted)
2. Are matrices correctly identified on Chain o	f Custody?	Yes 🗹	No L	Adjusted?	
3. Is it clear what analyses were requested?14. Were all holding times able to be met?		Yes 🗸	No 📙	Oha alsa dibuu	
(If no, notify customer for authorization.)		Yes 🗸	No 📙	Checked by:	
Special Handling (if applicable)					
15. Was client notified of all discrepancies with	this order?	Yes 🗌	No 🗌	NA 🗸	•
Person Notified:	Date				
By Whom:	Via:	eMail P		In Person	
Regarding:					
Client Instructions:					
16. Additional remarks:					
17. Cooler Information					
her many training a new forcement and the	Seal Intact Seal No	Seal Date	Signed By		
1 1.0 Good Ye	es		- Colon and Colon i		
2 1.0 Good Y∈	es				

Ci	hain	-of-Cu	istody Record	Turn-Around	Time:	Samo	der														
Client:	Har	VEST	mid stream	□ Standard	☑ Rush														NT		
				Project Name						Ale .								KA	\TC	JK	T
Mailing A	Address	1755	ARROYO DR	Project #:	al H=	Z.			400	14 11				viron				7400		0	*1
RIDOM	1. Fie	1d NI	n 87413	Project #:	0, 1	0		4901 Hawkins NE - Albuquerque, NM 87109													
Phone #:	508	1632	- U475	-				Tel. 505-345-3975 Fax 505-345-4107 Analysis Request							44 5						
			@ Harvest mids them	Project Mana	ger:																
QA/QC Pa		9	· Com					TME's (8021)	TPH (Gas only)	(GRO / DRO / MRO)			٦	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	PCB's						
☐ Standa			☐ Level 4 (Full Validation)	KIJUN	HONG	Ī	0	8) 8	(Ga	8			OIMO)	PO	PC						
Accredita ☐ NELAI				Sampler: M	organ,	Killio,	٠ ،	MB	H		=	= 1	2	Š,	8081 Pesticides / 8082						
		□ Otne	r	Office	V Yes	<u> </u>	(27)	+	+	잃	TPH (Method 418.1)	EDB (Method 504.1)	FAHS (83 to 0f 6270 BCRA 8 Metals	000	8/8		(A)				Air Bubbles (Y or N)
□ EDD (Type)_			ANDIE Tem	perature 2	U.A.	2.00	+ MIBE	MTBE +	B (G	pod	po		N, O	cide	(A)	\- <u>-</u>	-3			2
Date	Time	Matrix	Sample Request ID	Container	Preservative	77-		+ M	+	8015B	Meth	Met	0 8	F.	esti	8	Sem	hlorde			sples
Balo	11110	IVIQUIX	Sample Request ID	Type and #	Туре	2.0		BTEX	BTEX	TPH 8	Ĭ.	9	RCRA & Metals	ions	81 F	8260B (VOA)	8270 (Semi-VOA)	7	.		Buk
12/1/10	16.00	(11	North Wall	medillet		1812-3	Michigan and the supplemental	m	<u>m</u>	片	F		L M	Æ	80	82	82		_	\bot	Ą
		50:1	North Walle West Wall Lomposite South Wall Composite	1-462	Cool		700	X	_	A	_	_	\perp					X	\perp	\perp	
12/26/10	10/0	5011	(0m 2051+C	1-462			-002	X		X	\perp							X			
12/16/18 1	020	Soil	comfosite	1-462			703	χ		X								X			
12/18/18/1	030	5011	Fast wallsite	1-462	سلم		-204	X		X								Y			
		1																	\top	T	
																				\top	\top
						365							\top							+	\top
									\top	\neg		\top	1					+	+	+	+
										1	\top	+	+					\dashv	+	+	+
							*****		\top		+	+	+	-	Н	\vdash		_	+	-	+
-									+	+	+	+	+	+				+	+	+	+
		-		5 %	1		-		+	_	-	+	+-					\dashv	+	+	+
Date: Ti	me:	Relinquishe		Received by:	1	Pate	Time	Rem	arks:				. (.		Щ	0 1					\perp
16/18	337	Miles	of Xillion	Received by: Date Time Remarks: Received by: Date Time Remarks: Morgan Killion @ Pahao. com Received by: Date Time																	
Date: Ti	me:	Relinquishe	евоу:	Received by:	100) Date 12/01	Time														
12/4/c 1	871	/. Mu	st Walter	///	hon		900														
If ne	ecessary	samples subn	nitted to Hall Environmental may be subc	ontracted to other ac	credited laboratorie	s. This serves	as notice of this	possib	ility. Ar	ny sub	-contra	cted da	ta will l	e clear	ly nota	ted on	the ar	nalytica	report.		

District I
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

Other (describe)

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Volume/Weight Recovered (provide units)

Release Notification

Responsible Party

Responsible	Party	Harvest Four Co	orners, LLC	OGRID	37388							
Contact Nam	ie	Kijun Hong		Contact T	elephone	(505) 632-4475						
Contact emai	i1	khong@harvest	midstream.com	Incident #	Incident # (assigned by OCD) NCS1828937011							
Contact maili	ing address	1755 Arroyo Dr	., Farmington, NM	M 87413								
			Location	of Release S	ource							
Latitude		36.674729	(NAD 83 in deci	Longitude	mal places)	07.870416						
			(NAD 65 in deci	mai aegrees to 5 aectr	nai piaces)							
Site Name	Trunk J			Site Type	Site Type Pipeline							
Date Release	Discovered	8/24/2018		API# (if app	plicable)							
						A TO THE PROPERTY OF THE PROPE						
Unit Letter	Section	Township	Range	Cour	nty	NMOCD						
D	11	28N	10W	San J	uan	DEC 0 3 2018						
Surface Owner	D State	M Fodovol □ Tv	ibal Private (N	Tomas.		`						
Surface Owner	State	✓ rederal ☐ II	ibai 🔛 Private (iv	ame:		DISTRICT III						
			Nature and	Volume of 1	Release	ा विकास विकास करते हैं।						
	Materia	l(s) Released (Select al	I that apply and attach c	ealculations or specific	iustification for the	volumes provided below)						
Crude Oil		Volume Release		arearations of specific	Volume Recov							
Produced	Water	Volume Release	d (bbls) 23 BBLs		Volume Recoveremoved	vered (bbls) 55 Yards of impacted soil						
		Is the concentrat	ion of dissolved ch	loride in the	Yes No	0						
Condensar	te	Volume Release			Volume Recov	vered (bbls)						
Natural G	as	Volume Release	d (Mcf)		Volume Recov	vered (Mcf)						

Cause of Release

Pipeline failure due to corrosion.

Volume/Weight Released (provide units)

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider this a major release?						
19.15.29.7(A) NMAC?	Unauthorized release exceeding 25 bbls of liquid that may with reasonable probability to reach a						
19.113.29.7(11)11.11111.	watercourse.						
☐ Yes ☐ No							
If YES, was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?						
Yes, Matt Webre (Williams) notified Cory Smith, Vanessa Fields, and Jim Griswold (OCD) by email on 8/24/2018 @ 3:47pm.							

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	⊠ Yes □ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	⊠ Yes □ No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information Topographic/Aerial maps Laboratory data including chain of custody	ls.

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the Gailed to adequately investigate and remediate contamination that pose a threaddition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	fications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In
Printed Name: Kijun Hong	Title: Environmental Specialist
Signature:	Date:11/21/2018
email: khong@harvestmidstream.com	Telephone: <u>505-436-8457</u>
OCD Only	
Received by:	Date:

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following it	ems must be included in the closure report.						
△A scaled site and sampling diagram as described in 19.15.29.11	NMAC						
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)							
☐ Laboratory analyses of final sampling (Note: appropriate Ol	DC District office must be notified 2 days prior to final sampling)						
☑Description of remediation activities							
A Description of Temediation activities							
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and renhuman health or the environment. In addition, OCD acceptance of a compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the confaccordance with 19.15.29.13 NMAC including notification to the O Printed Name: Kijun Hong	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in						
Signature:	Date:						
email: <u>khong@harvestmidstream.com</u>	Telephone: <u>505-436-8457</u>						
N							
Received by: Vanossa Fields	Date: 12/3/2018						
remediate contamination that poses a threat to groundwater, surface party of compliance with any other federal, state, or local laws and/o	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations. Date: Date:						
Printed Name: 1200552 Fields	Title: COMONONS I Strong						

National Flood Hazard Layer FIRMette FEMA T29N R10W S34 Zone A San Juan County 350064 AREA OF MINIMAL FLOOD HAZARD T28N R10W S10 T28N R10W.S11 The National Map: Orthoimagery. Data refreshed October 2017. 1:6,000

2,000

250

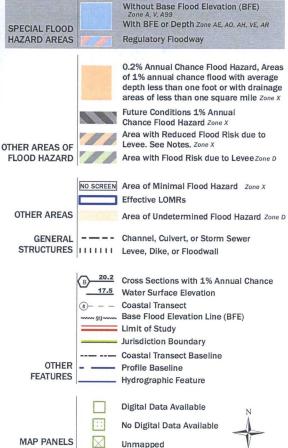
500

1,000

1,500

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT





The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/20/2018 at 4:36:30 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 243486.82

Northing (Y): 4062629.43

Radius: 305



New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

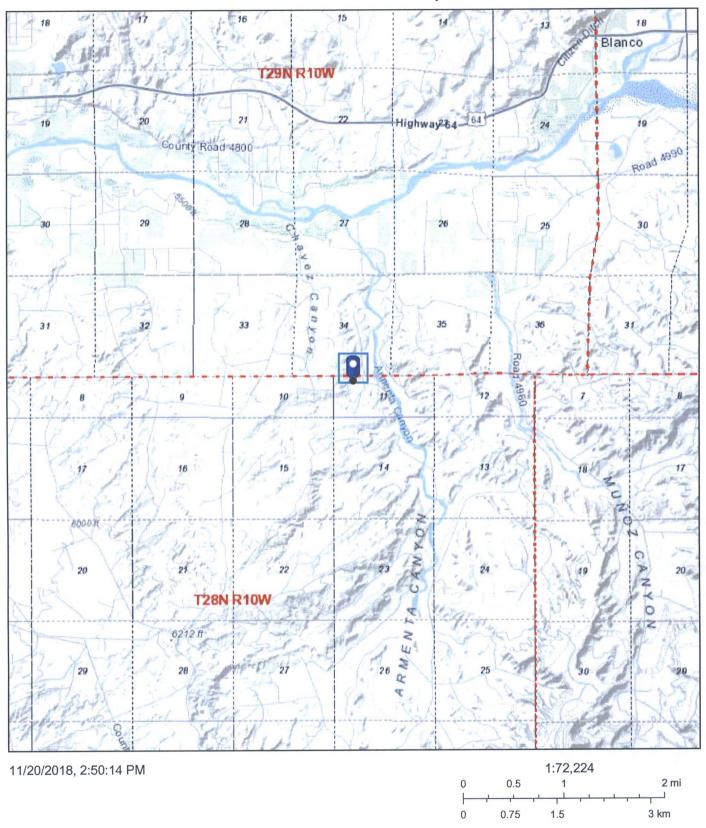
UTMNAD83 Radius Search (in meters):

Easting (X): 243486.82

Northing (Y): 4062629.43

Radius: 805

Trunk J Mine Map



Bureau of Land Management Geographic Coordinate Database, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/ NASA, NGA, EPA, USDA

Narrative of Remedial Activities

The Harvest Four Corners, LLC (Harvest) Trunk J pipeline release site is located at N36.67429, W107.87042 in Unit Letter L, Section 11, Township 28 North, Range 10 West, in San Juan County, New Mexico. The release resulted from corrosion of the pipeline discovered on August 24, 2018, and the release is estimated to have started on August 23, 2018, during performance of maintenance activities on another section of the same pipeline. The liquids traveled approximately 270 feet to a nearby dry wash.

On August 25, 2018, Harvest initiated remediation by dig and haul at the location. Approximately 15 cubic yards of soil were removed on August 25th, 20 cubic yards on August 27th, and 20 cubic yards on August 30th, resulting in a total of approximately 55 cubic yards of hydrocarbon impacted soils removed to an approved landfarm for remediation/disposal.

Notification for confirmation sampling was provided on August 29, 2018. On August 31, 2018, two five-point composite samples (*Floor* and *Side Walls*) were collected from the excavation and six five-point composite samples (*D-1*, *D-2*, *D-3*, *D-4*, *W-1*, and *W-2*) were collected from the flow path of the release for laboratory analysis. Upon arrival at the laboratory, the samples were discovered to be outside acceptable temperature ranges and rejected for analysis. Notification of the error was provided and confirmation samples were re-collected from the original locations on September 4, 2018.

Soil samples collected for laboratory analysis were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. All samples were analyzed for chloride per USEPA Method 300.0, BTEX per USEPA Method 8260B and TPH per USEPA 8015M/D.

Laboratory analytical results for chloride, total BTEX, benzene, and total TPH are below the remediation standards. No qualifier flags were indicated for the laboratory results.

The excavation was backfilled with clean, imported soil on September 10, 2018.

Photograph Log Trunk J Pipeline Release Harvest Four Corners, LLC



Photograph #1

Client: Harvest Four Corners LLC

Site Name:

Trunk J Pipeline Release

Date Photo Taken: September 10, 2018

Release Location: N36.67429, W107.87042

L-11-28N-10W San Juan County, NM



Description: Facing northeast, view of remedial excavation and pipeline.

Remediation Excavation and Sampling Form

Site Name <u>TR</u>	KJ			
Excavation Dime	ensions (feet)			
_17/2'	Length //′	Width	10'	Depth
	ram and Sample Locations eatures, excavation extents, visual ob	servations, sample l	ocations, north a	rrow, etc.)
	N		X=510	EWALL
	X O III	O X		
Sample Informat	ion	·		
OCD Witness San Agency(s) Repres	npling Yes or No sentative(s)	7		

Sample ID	Sample Date	Type (Composite, Grab)	Location (Floor, Sidewall)	Comments
TEKT FLOOR	8/31/18	Composite	FLOOR	
TEKJ FLOGE	8/3/18	Composite	FLOOR SI'DEWALL	
	/ //	,		

Remediation Excavation and Sampling Form

Site Name TRK J DRAINA	GE/WASH 8/31/18
Excavation Dimensions (feet)	
Length	Width Depth
Excavation Diagram and Sample Location (Depict notable site features, excavation extents, visu	
PIPE Excavation N	X = DRAINAGE O = Wash
0- ***	

Sample Information

OCD Witness Sampling Yes or No

Agency(s) Representative(s)

		Type	Location	
Sample ID	Sample Date	(Composite, Grab)	(Floor, Sidewall)	Comments
DRAINAGE#1	8/31/18	Composite	DRAINAGE	
DRAINAGE#2	8/31/18	Composité	DRAINAGE	
DRAIDAGE#3	8/31/18	Composife	DRAINAGE	
DRAINAGE#4	8/31/18	Composite	DRAINAGE	
WASH #1	8/31/18	Composite	WASH	
WASH #2	8/31/18	Composite	WASH	
WASH #2	8/51/18	Composite	WASH	

Date: 11/19/2018

Table 1. Summary of Laboratory Analytical Results Harvest Four Corners, LLC Trunk J Pipeline Release San Juan County, New Mexico

				Laboratory Analytical Results								
Sample Name Date		Approximate Sample Depth (ft bgs)	Sample Location	Benzene (mg/kg)	Toluene (mg/kg)	Ethylben- zene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH as GRO (mg/kg)	TPH as DRO (mg/kg)	TPH as MRO (mg/kg)	Chloride (mg/kg)
一名在汉马县		mediation Stand	ard*	10	NE	NE	NE	50		100	(99)	
Floor	9/4/2018	10	Excavation Base	0.035	0.23	0.037	0.45	0.75	F 4		ET THE VIEW	600
Side Walls	9/4/2018	0 - 10	Excavation Sidewalls	<0.017	0.21	0.055			5.4	<9.3	<47	37
D-1	9/4/2018	Various	Drainage #1				0.80	-1.07	8.9	<10	<50	48
D-2	9/4/2018			<0.018	<0.037	<0.037	< 0.074	ND	<3.7	20	67	<30
		Various	Drainage #2	<0.018	< 0.035	< 0.035	< 0.071	ND	<3.5	<9.8	<49	
D-3	9/4/2018	Various	Drainage #3	<0.021	<0.041	<0.041	<0.082					<30
D-4	9/4/2018	Various	Drainage #4	<0.015				ND	<4.1	<9.4	<47	<30
W-1	9/4/2018				<0.031	<0.031	<0.062	ND	<3.1	<10	<51	<30
		Various	Wash #1	<0.018	< 0.035	< 0.035	< 0.071	ND	<3.5	<10	<50	
W-2	9/4/2018	Various	Wash #2	<0.017	< 0.034	< 0.034	<0.068	ND				<30
otes:	ft has - feet h	pelow grade curfoc			2.001	0.004	-0.000	IND	<3.4	<9.8	<49	<30

Notes:

ft bgs - feet below grade surface

mg/kg - milligrams per kilogram

NE - not established

ND - not detected above laboratory reporting limits

TPH - total petroleum hydrocarbons

GRO - gasoline range organics

DRO - diesel range organics

MRO - mineral oil range organics

*Per Table 1 of 19.15.29.12 NMAC, based on category "less than or equal to 50 feet" to groundwater



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

September 10, 2018

Kijun Hong Williams Field Services 188 Co. Rd 4900 Bloomfield, NM 87413 TEL: FAX

RE: Trunk J Line Leak

OrderNo.: 1809076

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 8 sample(s) on 9/5/2018 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1809076

Date Reported: 9/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Trunk J Line Leak

Lab ID: 1809076-001

Client Sample ID: Floor

Collection Date: 9/4/2018 12:30:00 PM

Received Date: 9/5/2018 7:00:00 AM

analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
PA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	37	30		mg/Kg	20	9/5/2018 11:19:31 PM	40171
PA METHOD 8015D MOD: GASOLINE RANGE						Analyst	RAA
Gasoline Range Organics (GRO)	5.4	3.7		mg/Kg	1	9/5/2018 3:11:57 PM	G53926
Surr: BFB	102	70-130		%Rec	1	9/5/2018 3:11:57 PM	G53926
PA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/6/2018 10:43:38 AM	40150
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2018 10:43:38 AM	40150
Surr: DNOP	86.7	50.6-138		%Rec	1	9/6/2018 10:43:38 AM	40150
PA METHOD 8260B: VOLATILES SHORT LIST	г					Analyst	RAA
Benzene	0.035	0.018		mg/Kg	1	9/5/2018 3:11:57 PM	R53926
Toluene	0.23	0.037		mg/Kg	1	9/5/2018 3:11:57 PM	R53926
Ethylbenzene	0.037	0.037		mg/Kg	1	9/5/2018 3:11:57 PM	R53926
Xylenes, Total	0.45	0.074		mg/Kg	1	9/5/2018 3:11:57 PM	R53926
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	9/5/2018 3:11:57 PM	R53926
Surr: Toluene-d8	93.6	70-130		%Rec	1	9/5/2018 3:11:57 PM	R53926

Matrix: SOIL

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

- 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
- PQL Practical Quanitative Limit
- 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 Page 1 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1809076

Date Reported: 9/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Trunk J Line Leak

Lab ID: 1809076-002 Client Sample ID: Side Walls

Collection Date: 9/4/2018 12:35:00 PM

Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						
Chloride	48	20	".		Analyst	
		30	mg/Kg	20	9/5/2018 11:56:44 PM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst:	RAA
Gasoline Range Organics (GRO)	8.9	3.4	mg/Kg	1	9/5/2018 7:49:41 PM	G53926
Surr: BFB	104	70-130	%Rec	1	9/5/2018 7:49:41 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					
Diesel Range Organics (DRO)	ND	10			Analyst:	
Motor Oil Range Organics (MRO)			mg/Kg	1	9/6/2018 11:07:56 AM	40150
Surr: DNOP	ND	50	mg/Kg	1	9/6/2018 11:07:56 AM	40150
	92.5	50.6-138	%Rec	1	9/6/2018 11:07:56 AM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst:	RAA
Benzene	ND	0.017	mg/Kg	1	9/5/2018 7:49:41 PM	R53926
Toluene	0.21	0.034	mg/Kg	1	9/5/2018 7:49:41 PM	
Ethylbenzene	0.055	0.034	0 0	1		R53926
Xylenes, Total	0.80	0.067	mg/Kg		9/5/2018 7:49:41 PM	R53926
Surr: 4-Bromofluorobenzene			mg/Kg	1	9/5/2018 7:49:41 PM	R53926
Surr: Toluene-d8	116	70-130	%Rec	1	9/5/2018 7:49:41 PM	R53926
Suit. Toluette-do	96.6	70-130	%Rec	1	9/5/2018 7:49:41 PM	R53926

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 12 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1809076

Date Reported: 9/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Trunk J Line Leak

Lab ID: 1809076-003

Client Sample ID: D-1

Collection Date: 9/4/2018 12:40:00 PM

Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	9/6/2018 12:09:09 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	9/5/2018 3:35:06 PM	G53926
Surr: BFB	103	70-130	%Rec	1	9/5/2018 3:35:06 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGAN	NICS				Analyst	Irm
Diesel Range Organics (DRO)	20	9.4	mg/Kg	1	9/6/2018 11:32:21 AM	40150
Motor Oil Range Organics (MRO)	67	47	mg/Kg	1	9/6/2018 11:32:21 AM	40150
Surr: DNOP	96.7	50.6-138	%Rec	1	9/6/2018 11:32:21 AM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	RAA
Benzene	ND	0.018	mg/Kg	1	9/5/2018 3:35:06 PM	R53926
Toluene	ND	0.037	mg/Kg	1	9/5/2018 3:35:06 PM	R53926
Ethylbenzene	ND	0.037	mg/Kg	1	9/5/2018 3:35:06 PM	R53926
Xylenes, Total	ND	0.074	mg/Kg	1	9/5/2018 3:35:06 PM	R53926
Surr: 4-Bromofluorobenzene	115	70-130	%Rec	1	9/5/2018 3:35:06 PM	R53926
Surr: Toluene-d8	97.6	70-130	%Rec	1	9/5/2018 3:35:06 PM	R53926

Matrix: SOIL

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 3 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1809076

Date Reported: 9/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Trunk J Line Leak

Lab ID: 1809076-004 Client Sample ID: D-2

Collection Date: 9/4/2018 12:45:00 PM

Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	30		mg/Kg	20	9/6/2018 9:16:28 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	RAA
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/5/2018 3:58:12 PM	G53926
Surr: BFB	105	70-130		%Rec	1	9/5/2018 3:58:12 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGAN	NICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/6/2018 11:56:39 AM	40150
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2018 11:56:39 AM	40150
Surr: DNOP	93.9	50.6-138		%Rec	1	9/6/2018 11:56:39 AM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	RAA
Benzene	ND	0.018		mg/Kg	1	9/5/2018 3:58:12 PM	R53926
Toluene	ND	0.035		mg/Kg	1	9/5/2018 3:58:12 PM	R53926
Ethylbenzene	ND	0.035		mg/Kg	1	9/5/2018 3:58:12 PM	R53926
Xylenes, Total	ND	0.071		mg/Kg	1	9/5/2018 3:58:12 PM	R53926
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	9/5/2018 3:58:12 PM	R53926
Surr: Toluene-d8	92.2	70-130		%Rec	1	9/5/2018 3:58:12 PM	R53926

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 12 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1809076

Date Reported: 9/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Trunk J Line Leak

Lab ID: 1809076-005

Client Sample ID: D-3

Collection Date: 9/4/2018 12:50:00 PM

Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	9/6/2018 9:28:52 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/5/2018 4:21:27 PM	G53926
Surr: BFB	103	70-130		%Rec	1	9/5/2018 4:21:27 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst	Irm
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2018 12:21:07 PM	40150
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2018 12:21:07 PM	40150
Surr: DNOP	96.6	50.6-138		%Rec	1	9/6/2018 12:21:07 PM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst	RAA
Benzene	ND	0.021		mg/Kg	1	9/5/2018 4:21:27 PM	R53926
Toluene	ND	0.041		mg/Kg	1	9/5/2018 4:21:27 PM	R53926
Ethylbenzene	ND	0.041		mg/Kg	1	9/5/2018 4:21:27 PM	R53926
Xylenes, Total	ND	0.082		mg/Kg	1	9/5/2018 4:21:27 PM	R53926
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	9/5/2018 4:21:27 PM	R53926
Surr: Toluene-d8	95.5	70-130		%Rec	1	9/5/2018 4:21:27 PM	R53926

Matrix: SOIL

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 5 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1809076

Date Reported: 9/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Trunk J Line Leak

Lab ID: 1809076-006 Client Sample ID: D-4

Collection Date: 9/4/2018 12:55:00 PM

Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	30		mg/Kg	20	9/6/2018 9:41:16 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	RAA
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	9/5/2018 4:44:37 PM	G53926
Surr: BFB	106	70-130		%Rec	1	9/5/2018 4:44:37 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/6/2018 12:45:28 PM	40150
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	9/6/2018 12:45:28 PM	40150
Surr: DNOP	95.5	50.6-138	4.5	%Rec	1	9/6/2018 12:45:28 PM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	RAA
Benzene	ND	0.015	1	mg/Kg	1	9/5/2018 4:44:37 PM	R53926
Toluene	ND	0.031	1	mg/Kg	1	9/5/2018 4:44:37 PM	R53926
Ethylbenzene	ND	0.031	1	mg/Kg	1	9/5/2018 4:44:37 PM	R53926
Xylenes, Total	ND	0.062	1	mg/Kg	1	9/5/2018 4:44:37 PM	R53926
Surr: 4-Bromofluorobenzene	119	70-130	(%Rec	1	9/5/2018 4:44:37 PM	R53926
Surr: Toluene-d8	94.8	70-130	C	%Rec	1	9/5/2018 4:44:37 PM	R53926

Matrix: SOIL

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 12 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1809076

Date Reported: 9/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Trunk J Line Leak

Lab ID: 1809076-007

Project:

Client Sample ID: W-1

Collection Date: 9/4/2018 1:00:00 PM

Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	9/6/2018 9:53:40 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst	RAA
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/5/2018 5:07:53 PM	G53926
Surr: BFB	98.6	70-130		%Rec	1	9/5/2018 5:07:53 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst	Irm
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/6/2018 1:09:59 PM	40150
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/6/2018 1:09:59 PM	40150
Surr: DNOP	97.9	50.6-138		%Rec	1	9/6/2018 1:09:59 PM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst	RAA
Benzene	ND	0.018		mg/Kg	1	9/5/2018 5:07:53 PM	R53926
Toluene	ND	0.035		mg/Kg	1	9/5/2018 5:07:53 PM	R53926
Ethylbenzene	ND	0.035		mg/Kg	1	9/5/2018 5:07:53 PM	R53926
Xylenes, Total	ND	0.071		mg/Kg	1	9/5/2018 5:07:53 PM	R53926
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	9/5/2018 5:07:53 PM	R53926
Surr: Toluene-d8	93.6	70-130		%Rec	1	9/5/2018 5:07:53 PM	R53926

Matrix: SOIL

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

- 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
- PQL Practical Quanitative Limit
- 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 Page 7 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1809076

Date Reported: 9/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Trunk J Line Leak

Lab ID: 1809076-008

Project:

Client Sample ID: W-2

Collection Date: 9/4/2018 1:05:00 PM

Matrix: SOIL Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	9/6/2018 10:06:04 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst:	RAA
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	9/5/2018 5:31:01 PM	G53926
Surr: BFB	103	70-130	%Rec	1	9/5/2018 5:31:01 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGAI	NICS				Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	9/6/2018 1:34:21 PM	40150
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/6/2018 1:34:21 PM	40150
Surr: DNOP	93.3	50.6-138	%Rec	1	9/6/2018 1:34:21 PM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst:	RAA
Benzene	ND	0.017	mg/Kg	1	9/5/2018 5:31:01 PM	R53926
Toluene	ND	0.034	mg/Kg	1	9/5/2018 5:31:01 PM	R53926
Ethylbenzene	ND	0.034	mg/Kg	1	9/5/2018 5:31:01 PM	R53926
Xylenes, Total	ND	0.068	mg/Kg	1	9/5/2018 5:31:01 PM	R53926
Surr: 4-Bromofluorobenzene	115	70-130	%Rec	1	9/5/2018 5:31:01 PM	R53926
Surr: Toluene-d8	97.3	70-130	%Rec	1	9/5/2018 5:31:01 PM	R53926

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 8 of 12 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809076

10-Sep-18

Client:

Williams Field Services

Project:

Trunk J Line Leak

Sample ID MB-40171

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 40171

RunNo: 53927

Prep Date: 9/5/2018 Analysis Date: 9/5/2018

SeqNo: 1781259

Units: mg/Kg

Qual

Analyte

Result ND SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

RPDLimit

Chloride

SampType: Ics

1.5

TestCode: EPA Method 300.0: Anions RunNo: 53927

Client ID: LCSS Prep Date: 9/5/2018

Sample ID LCS-40171

Batch ID: 40171

Analysis Date: 9/5/2018

SeqNo: 1781260

Units: mg/Kg

Analyte

PQL

SPK value SPK Ref Val %REC

RPDLimit

Qual

Result

1.5

%RPD

Chloride

110

Page 9 of 12

14

15.00

96.2

LowLimit

HighLimit

Qualifiers:

D

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded Not Detected at the Reporting Limit ND
- Practical Quanitative Limit **PQL**
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- Value above quantitation range
- Analyte detected below quantitation limits J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809076

10-Sep-18

Client:

Williams Field Services

Result

4.5

Project:

Analyte Surr: DNOP Trunk J Line Leak

Sample ID MB-40150	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 40150	RunNo: 53951								
Prep Date: 9/5/2018	Analysis Date: 9/6/2018	SeqNo: 1781019 Units: mg/Kg								
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual								
Diesel Range Organics (DRO)	ND 10									
Motor Oil Range Organics (MRO)	ND 50									
Surr: DNOP	9.0 10.00	89.6 50.6 138								
Sample ID LCS-40150	SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: LCSS	Batch ID: 40150	RunNo: 53951								
Prep Date: 9/5/2018	Analysis Date: 9/6/2018	SeqNo: 1781020 Units: mg/Kg								
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual								
Diesel Range Organics (DRO)	42 10 50.00	0 84.6 70 130								
Surr: DNOP	4.4 5.000	87.8 50.6 138								
Sample ID LCS-40196	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 40196	RunNo: 53951								
Prep Date: 9/6/2018	Analysis Date: 9/7/2018	SegNo: 1784387 Units: %Rec								

Sample ID MB-40196	SampTy	ре: МЕ	BLK	Test	Code: El	de: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch	ID: 40	: 40196 RunNo: 53951											
Prep Date: 9/6/2018	Analysis Da	ite: 9/	7/2018	S	SeqNo: 1	784388	Units: %Red	C						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Surr: DNOP	9.1		10.00		91.3	50.6	138							

%REC

90.1

LowLimit

50.6

HighLimit

138

%RPD

RPDLimit

Qual

SPK value SPK Ref Val

5.000

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
- PQL Practical Quanitative Limit
- 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

Page 10 of 12

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809076

10-Sep-18

Client:

Williams Field Services

Project:

Trunk J Line Leak

Project: Trunk J	Line Leak										
Sample ID 100ng Ics	SampT	ype: LC	\$4	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List		
Client ID: BatchQC	Batch	ID: R5	3926	F	RunNo: 5	3926					
Prep Date:	Analysis D	ate: 9/	5/2018	S	SeqNo: 1	781316	Units: mg/k	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.0	0.025	1.000	0	103	80	120				
Toluene	1.1	0.050	1.000	0	108	80	120				
Ethylbenzene	1.1	0.050	1.000	0	107	80	120				
Xylenes, Total	3.2	0.10	3.000	0	105	80	120				
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130				
Surr: Toluene-d8	0.51		0.5000		102	70	130				
Sample ID Ics-40132	SampType: LCS4 TestCode: EPA Method 8260B: Volatiles Short List										
Client ID: BatchQC	Batch	Batch ID: 40132 RunNo: 53926									
Prep Date: 9/4/2018	Analysis D	ate: 9/	5/2018	S	SeqNo: 1	781359	Units: %Re	С			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 4-Bromofluorobenzene	0.55		0.5000		111	70	130				
Surr: Toluene-d8	0.47		0.5000		94.4	70	130				
Sample ID mb-40132	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List		
Sample ID mb-40132 Client ID: PBS		ype: ME			tCode: El		8260B: Vola	tiles Short	List		
		1D: 40	132	F		3926	8260B: Vola Units: %Re		List		
Client ID: PBS	Batch	1D: 40	132 5/2018	F	RunNo: 5 SeqNo: 1 %REC	3926			List RPDLimit	Qual	
Client ID: PBS Prep Date: 9/4/2018	Batch Analysis D	n ID: 40 °	132 5/2018	F	RunNo: 5	3926 781360	Units: %Re	С		Qual	
Client ID: PBS Prep Date: 9/4/2018 Analyte	Batch Analysis D Result	n ID: 40 °	132 5/2018 SPK value	F	RunNo: 5 SeqNo: 1 %REC	3926 781360 LowLimit	Units: %Re	С		Qual	
Client ID: PBS Prep Date: 9/4/2018 Analyte Surr: 4-Bromofluorobenzene	Batch Analysis D Result 0.60 0.48	n ID: 40 °	5/2018 SPK value 0.5000 0.5000	F SPK Ref Val	RunNo: 5 SeqNo: 1 %REC 120 96.9	3926 781360 LowLimit 70 70	Units: %Re HighLimit	c %RPD	RPDLimit	Qual	
Client ID: PBS Prep Date: 9/4/2018 Analyte Surr: 4-Bromofluorobenzene Surr: Toluene-d8	Batch Analysis D Result 0.60 0.48	PQL	5/2018 SPK value 0.5000 0.5000	SPK Ref Val	RunNo: 5 SeqNo: 1 %REC 120 96.9	3926 781360 LowLimit 70 70 PA Method	Units: %Re HighLimit 130 130	c %RPD	RPDLimit	Qual	
Client ID: PBS Prep Date: 9/4/2018 Analyte Surr: 4-Bromofluorobenzene Surr: Toluene-d8 Sample ID rb	Batch Analysis D Result 0.60 0.48	PQL Type: ME	5/2018 SPK value 0.5000 0.5000 BLK 3926	SPK Ref Val Tes	RunNo: 5 SeqNo: 1 %REC 120 96.9	3926 781360 LowLimit 70 70 PA Method	Units: %Re HighLimit 130 130	c %RPD tiles Short	RPDLimit	Qual	
Client ID: PBS Prep Date: 9/4/2018 Analyte Surr: 4-Bromofluorobenzene Surr: Toluene-d8 Sample ID rb Client ID: PBS	Batch Analysis D Result 0.60 0.48 SampT Batch	PQL Type: ME	5/2018 SPK value 0.5000 0.5000 0.5000 BLK 3926 5/2018	SPK Ref Val Tes	RunNo: 5 SeqNo: 1 %REC 120 96.9 tCode: El RunNo: 5 SeqNo: 1	3926 781360 LowLimit 70 70 PA Method	Units: %Re HighLimit 130 130 8260B: Vola	c %RPD tiles Short	RPDLimit	Qual	
Client ID: PBS Prep Date: 9/4/2018 Analyte Surr: 4-Bromofluorobenzene Surr: Toluene-d8 Sample ID rb Client ID: PBS Prep Date:	Batch Analysis D Result 0.60 0.48 SampT Batch Analysis D	PQL PQL FQL FQL FQL FQL FQL FQL	5/2018 SPK value 0.5000 0.5000 0.5000 BLK 3926 5/2018	SPK Ref Val Tes	RunNo: 5 SeqNo: 1 %REC 120 96.9 tCode: El RunNo: 5 SeqNo: 1	3926 781360 LowLimit 70 70 PA Method 3926 781361	Units: %Re HighLimit 130 130 8260B: Vola Units: mg/h	c %RPD tiles Short	RPDLimit		
Client ID: PBS Prep Date: 9/4/2018 Analyte Surr: 4-Bromofluorobenzene Surr: Toluene-d8 Sample ID rb Client ID: PBS Prep Date: Analyte	Batch Analysis D Result 0.60 0.48 SampT Batch Analysis D Result	PQL PQL PQL PQL PQL PQL PQL PQL PQL	5/2018 SPK value 0.5000 0.5000 0.5000 BLK 3926 5/2018	SPK Ref Val Tes	RunNo: 5 SeqNo: 1 %REC 120 96.9 tCode: El RunNo: 5 SeqNo: 1	3926 781360 LowLimit 70 70 PA Method 3926 781361	Units: %Re HighLimit 130 130 8260B: Vola Units: mg/h	c %RPD tiles Short	RPDLimit		
Client ID: PBS Prep Date: 9/4/2018 Analyte Surr: 4-Bromofluorobenzene Surr: Toluene-d8 Sample ID rb Client ID: PBS Prep Date: Analyte Benzene	Batch Analysis D Result 0.60 0.48 SampT Batch Analysis D Result ND	PQL PQL PQL 0.025	5/2018 SPK value 0.5000 0.5000 0.5000 BLK 3926 5/2018	SPK Ref Val Tes	RunNo: 5 SeqNo: 1 %REC 120 96.9 tCode: El RunNo: 5 SeqNo: 1	3926 781360 LowLimit 70 70 PA Method 3926 781361	Units: %Re HighLimit 130 130 8260B: Vola Units: mg/h	c %RPD tiles Short	RPDLimit		
Client ID: PBS Prep Date: 9/4/2018 Analyte Surr: 4-Bromofluorobenzene Surr: Toluene-d8 Sample ID rb Client ID: PBS Prep Date: Analyte Benzene Toluene	Batch Analysis D Result 0.60 0.48 SampT Batch Analysis D Result ND ND	PQL Type: ME 1D: R5 PQL 0.025 0.050	5/2018 SPK value 0.5000 0.5000 0.5000 BLK 3926 5/2018	SPK Ref Val Tes	RunNo: 5 SeqNo: 1 %REC 120 96.9 tCode: El RunNo: 5 SeqNo: 1	3926 781360 LowLimit 70 70 PA Method 3926 781361	Units: %Re HighLimit 130 130 8260B: Vola Units: mg/h	c %RPD tiles Short	RPDLimit		
Client ID: PBS Prep Date: 9/4/2018 Analyte Surr: 4-Bromofluorobenzene Surr: Toluene-d8 Sample ID rb Client ID: PBS Prep Date: Analyte Benzene Toluene Ethylbenzene	Batch Analysis D Result 0.60 0.48 SampT Batch Analysis D Result ND ND ND	PQL Type: ME Type: ME Type: MS T	5/2018 SPK value 0.5000 0.5000 0.5000 BLK 3926 5/2018	SPK Ref Val Tes	RunNo: 5 SeqNo: 1 %REC 120 96.9 tCode: El RunNo: 5 SeqNo: 1	3926 781360 LowLimit 70 70 PA Method 3926 781361	Units: %Re HighLimit 130 130 8260B: Vola Units: mg/h	c %RPD tiles Short	RPDLimit		
Client ID: PBS Prep Date: 9/4/2018 Analyte Surr: 4-Bromofluorobenzene Surr: Toluene-d8 Sample ID rb Client ID: PBS Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Batch Analysis D Result 0.60 0.48 SampT Batch Analysis D Result ND ND ND ND ND	PQL Type: ME Type: ME Type: MS T	5/2018 SPK value 0.5000 0.5000 3LK 3926 5/2018 SPK value	SPK Ref Val Tes	RunNo: 5. SeqNo: 1 %REC 120 96.9 tCode: El RunNo: 5. SeqNo: 1 %REC	3926 781360 LowLimit 70 70 PA Method 3926 781361 LowLimit	Units: %Re HighLimit 130 130 8260B: Vola Units: mg/k	c %RPD tiles Short	RPDLimit		

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

PQL Practical Quanitative Limit

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

Page 11 of 12

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809076

10-Sep-18

Client:

Williams Field Services

Project:

Trunk J Line Leak

Sample ID Ics-40132

SampType: LCS

TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID:

LCSS

Batch ID: 40132

RunNo: 53926

Sample ID mb-40132

510

Prep Date:

9/4/2018

Analysis Date: 9/5/2018

SeqNo: 1781407

Units: %Rec

130

Qual

Analyte

Result

SPK value SPK Ref Val %REC 103

LowLimit HighLimit

RPDLimit %RPD

Surr: BFB

SampType: MBLK

RunNo: 53926

TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: Prep Date:

PBS

Batch ID: 40132 9/5/2018

Units: %Rec

Analyte

9/4/2018

Analysis Date:

SeqNo: 1781408

HighLimit

130

Result 530 SPK value SPK Ref Val 500.0

SPK value SPK Ref Val

500.0

%REC 107

70

LowLimit

LowLimit

%RPD **RPDLimit**

Qual

Surr: BFB

Sample ID rb

SampType: MBLK

TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID:

Prep Date:

Batch ID: **G53926**

PQL

PQL

RunNo: 53926

%REC

Analyte

Result

Result

25

470

Analysis Date: 9/5/2018

SeqNo: 1781409

Units: mg/Kg HighLimit

%RPD

RPDLimit Qual

Gasoline Range Organics (GRO) Surr: BFB

ND 470 5.0 500.0

93.3

%RPD

Sample ID 2.5ug gro Ics

LCSS

SampType: LCS

TestCode: EPA Method 8015D Mod: Gasoline Range

RunNo: 53926

130

Client ID:

Prep Date:

Batch ID: G53926 Analysis Date: 9/5/2018

PQL

5.0

SeqNo: 1781674

Units: mg/Kg

Qual

Analyte Gasoline Range Organics (GRO) Surr: BFB

SPK value SPK Ref Val 25.00 500.0

0 93.1

%REC 98.2

70 70

HighLimit 130 130 **RPDLimit**

Page 12 of 12

Qualifiers: Value exceeds Maximum Contaminant Level

Holding times for preparation or analysis exceeded Η

PQL

Sample Diluted Due to Matrix D

% Recovery outside of range due to dilution or matrix

Not Detected at the Reporting Limit ND

Practical Quanitative Limit

В Analyte detected in the associated Method Blank

Value above quantitation range Analyte detected below quantitation limits I

P Sample pH Not In Range

E

RL Reporting Detection Limit

Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: WILLIAMS FIELD SERVI	Work Order Number:	1809076		RcptNo:	1
Received By: Anne Thorne 9/5	5/2018 7:00:00 AM		anne Man	_	
Completed By: Anne Thorne 9/5	5/2018 9:14:24 AM		anne Ham		
Reviewed By: TO 09/	05/18		Carre Street		
Reviewed By: Anne Thorne 9/5 Reviewed By: TO 09/05/18					
Chain of Custody					
Is Chain of Custody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered?		Courier			
Log In					
3. Was an attempt made to cool the samples?		Yes 🗸	No 🗌	NA 🗆	
A Maria III complete vaccinal at a torrespondent	00 0 4- 0 000	v [4]	No 🗆	NA 🗆	
4. Were all samples received at a temperature of >	0 6 6 6 6 6	Yes 🗹	140	NA L	
5. Sample(s) in proper container(s)?		Yes 🗸	No 🗌		
6. Sufficient sample volume for indicated test(s)?		Yes 🗸	No 🗌		
7. Are samples (except VOA and ONG) properly pre	served?	Yes 🗸	No 🗌		
8. Was preservative added to bottles?		Yes	No 🗸	NA 🗌	
9. VOA vials have zero headspace?		Yes	No 🗌	No VOA Vials 🗹	
10. Were any sample containers received broken?		Yes	No 🗹	# of preserved	
44 Page 200 200 200 200 200 200 200 200 200 20		V	No 🗆	bottles checked	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 📙	for pH: (<2 or	>12 unless noted)
12. Are matrices correctly identified on Chain of Custo	ody?	Yes 🗸	No 🗆	Adjusted?	
13. Is it clear what analyses were requested?		Yes 🗸	No 🗌		
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗸	No L	Checked by:	
Special Handling (if applicable)					
15. Was client notified of all discrepancies with this of	rder?	Yes	No 🗆	NA 🗹	
Person Notified:	Date				
By Whom:	Via:	eMail Pho	one 🗌 Fax	☐ In Person	
Regarding:					
Client Instructions:				:	14
16. Additional remarks:					
17. Cooler Information					
Cooler No Temp °G Condition Seal In	tact Seal No Se	eal Date S	igned By		
3 1.3 Good Yes	10.00				

	hain-	of-Cu	stody Record										BIN/	/TF	10	BIB	4 =	NT	A I	
Client:	WFS	;		□ Standard		2-2a7] -	STEEL STEEL										TO		Y
				Project Name	:						vw.ha									
Mailing	Address	1755	ARROYD DR.	TRUNK -	THIN	C KE9K		490)1 Ha	wkins	NE -	Alb	ouque	erqu	e, N	M 87	109			
Bloo	m Fi	eld 1	Im 87413	Project #:						5-345-				-1.5		4107				
			-4475				W.				F	nal	ysis	Req	uest					
email or	Fax#: K	110 N.	HONGOWillians.com	Project Manag			=	nly)	RO)				04)	"						
QA/QC F				Kij	un Hong	3	MB's (8021)	(Gas only)	RO / MRO)		(S)		2,4S	PCB's						
□ Stand			☐ Level 4 (Full Validation)				6.A	1 (G	DRO		SIMS)		,5,P(32 P						
Accredit		□ Othe	r	Sampler: Onvice:	m K		TAL T	TPH 4	-	418.1)	8270		3,NC	/ 808		8				S
□ EDD	(Type)_	***			Jerraiture 2.13	ericana.	BE -	BE	(GR	4 p		tals	l,NC	ides	2	, 0	3			8
Date	Time	Matrix	Sample Request ID	Container Type and #	ろんがい。 Preservative Type		BTEX + MTBE	BTEX + MTBE	TPH 8015B (GRO	TPH (Method	PAH's (8310 or	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	Chlond	i		Air Bubbles (Y or N)
14/18	1230	50:1	Floor	1-4,02	C001	701	X		X								X			
4/13			ideW a 115	1-402	1	702	X		X								X			
4/18 4/18 4/18	1240	50:1		1-402		703	Х		X								X			
4//8		soil	0-2	1-402		704	X		X								X		\perp	\perp
4118	1250		D-3	1-402		-7.05	X		X								X			\perp
14/18	1255	Soil	D-4	1-402		-206	X		X			-					X			
7/18	1500	5011	W-1.	1-402		707	X		X								X			\perp
4/18	1:05	50:1	W-2.	1-402		-208	X		1	\perp							X	\perp	\perp	
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Date:	Received by: Received by: Date Time Received by: An in 1917 Once			u) -	W	2Sh										8			

District I
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 Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

	Party	Harvest Four Co	rners, LLC	OGRID	37388			
Contact Nam	ie	Kijun Hong		Contact T	Contact Telephone (505) 632-4475			
Contact emai	1	khong@harvestr	midstream.com	Incident #	Incident # (assigned by OCD) NVF1829149123			
Contact maili	ing address	1755 Arroyo Dr.	, Farmington, NM	1 87413				
			Location (of Release S	Source			
		36.926192	(NAD 83 in deci	Longitude mal degrees to 5 dec		-108.143259		
Site Name	Lateral A-1	5		Site Type	Pipeline			
Date Release	Discovered	9/30/2018		API# (if ap	pplicable)			
Unit Letter	Section	Township	Range	Cou	nty	NMOCD		
L	6	31N	12W	San .	Juan	JAN 0 3 2019		
Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name:						DISTRICT III		
			Nature and					
Crude Oil			l that apply and attach c		c justification for	the volumes provided below)		
☐ Crude Oil	l	Volume Release	l that apply and attach c	alculations or specifi	c justification for Volume Re	the volumes provided below) covered (bbls) covered (bbls) 470 yards removed		
_	l	Volume Release Volume Release Is the concentrate	l that apply and attach of d (bbls) d (bbls) 470 yards ion of dissolved ch	removed	c justification for Volume Re	covered (bbls) covered (bbls) 470 yards removed		
_	Water	Volume Release	l that apply and attach of d (bbls) d (bbls) 470 yards ion of dissolved ch >10,000 mg/l?	removed	volume Re	covered (bbls) covered (bbls) 470 yards removed		
Produced	Water	Volume Release Volume Release Is the concentrate produced water	l that apply and attach of d (bbls) d (bbls) 470 yards ion of dissolved ch >10,000 mg/l? d (bbls)	removed	volume Re Volume Re Volume Re Volume Re Volume Re	covered (bbls) 470 yards removed No		
☐ Condensa	Water	Volume Release Volume Release Is the concentrate produced water of the Volume Release Volume Release	l that apply and attach of d (bbls) d (bbls) 470 yards ion of dissolved ch >10,000 mg/l? d (bbls)	removed calculations or specifications or speci	volume Re Volume Re Volume Re Volume Re Volume Re Volume Re	No covered (bbls) 470 yards removed No covered (bbls)		
☐ Condensa ☐ Natural G ☐ Other (des	Water tte fas scribe)	Volume Release Volume Release Is the concentrate produced water of the Volume Release Volume Release	l that apply and attach of d (bbls) d (bbls) 470 yards ion of dissolved ch >10,000 mg/l? d (bbls) d (Mcf) 24	removed calculations or specifications or speci	volume Re Volume Re Volume Re Volume Re Volume Re Volume Re	covered (bbls) covered (bbls) 470 yards removed No covered (bbls) covered (bbls) covered (Mcf) 0		
☐ Condensa ☐ Natural G ☐ Other (des	Water te das scribe)	Volume Release Volume Release Is the concentrate produced water in Volume Release Volume Release Volume/Weight	l that apply and attach of d (bbls) d (bbls) 470 yards ion of dissolved ch >10,000 mg/l? d (bbls) d (Mcf) 24	removed calculations or specifications or speci	volume Re Volume Re Volume Re Volume Re Volume Re Volume Re	covered (bbls) covered (bbls) 470 yards removed No covered (bbls) covered (bbls) covered (Mcf) 0		
☐ Condensa ☐ Natural G ☐ Other (des	Water te das scribe)	Volume Release Volume Release Is the concentrate produced water in Volume Release Volume Release Volume/Weight	l that apply and attach of d (bbls) d (bbls) 470 yards ion of dissolved ch >10,000 mg/l? d (bbls) d (Mcf) 24	removed calculations or specifications or speci	volume Re Volume Re Volume Re Volume Re Volume Re Volume Re	covered (bbls) covered (bbls) 470 yards removed No covered (bbls) covered (bbls) covered (Mcf) 0		
☐ Condensa ☐ Natural G ☐ Other (des	Water te das scribe)	Volume Release Volume Release Is the concentrate produced water in Volume Release Volume Release Volume/Weight	l that apply and attach of d (bbls) d (bbls) 470 yards ion of dissolved ch >10,000 mg/l? d (bbls) d (Mcf) 24	removed calculations or specifications or speci	volume Re Volume Re Volume Re Volume Re Volume Re Volume Re	covered (bbls) covered (bbls) 470 yards removed No covered (bbls) covered (bbls) covered (Mcf) 0		

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
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Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the Unauthorized release expected to		y consider this a major release? of liquid including historical impacts.
⊠ Yes □ No			
If YES, was immediate no	otice given to the OCD? By whom?	To whom? Who	en and by what means (phone, email, etc)?
Yes, Kijun Hong notified	d Cory Smith, Vanessa Fields, and	Jim Griswold (OCD) by email on 10/1/2018 @ 12:09pm.
	Initi	al Response	e
The responsible p	party must undertake the following actions im	mediately unless they	could create a safety hazard that would result in injury
The source of the rele	ease has been stonned.		
	s been secured to protect human heal	Ith and the enviro	onment.
			orbent pads, or other containment devices.
	ecoverable materials have been remo		
If all the actions described	d above have <u>not</u> been undertaken, ex	xplain why:	
has begun, please attach	a narrative of actions to date. If ren	nedial efforts have	n immediately after discovery of a release. If remediation we been successfully completed or if the release occurred ch all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain rele- ment. The acceptance of a C-141 report late and remediate contamination that pos-	ase notifications and by the OCD does not a threat to ground	knowledge and understand that pursuant to OCD rules and and perform corrective actions for releases which may endanger of relieve the operator of liability should their operations have dwater, surface water, human health or the environment. In ity for compliance with any other federal, state, or local laws
Printed Name: Kiju	in Hong	Title:	Environmental Specialist
Signature:	16 H)	Date:	10/15/2018
email: <u>khong@harve</u>	estmidstream.com	Telephone:	505-436-8457
OCD Only			
Received by:		Date:	

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	~61 (ft bgs)					
Did this release impact groundwater or surface water?	☐ Yes ☒ No					
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?						
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?						
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?						
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No					
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No					
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?						
Are the lateral extents of the release within 300 feet of a wetland?						
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No					
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No					
Are the lateral extents of the release within a 100-year floodplain? Did the release impact areas not on an exploration, development, production, or storage site?						
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soi contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.						
Characterization Report Checklist: Each of the following items must be included in the report.						
 Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information Topographic/Aerial maps Laboratory data including chain of custody 	s.					

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141

Page 4

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.						
Printed Name: Kijun Hong	Title:	Environmental Specialist				
Signature:	Date:	12/27/2018				
email: <u>khong@harvestmidstream.com</u>	Telephone: _	505-436-8457				
OCD Only Received by:	·	Date:				

Harvest Midstream: Lateral A-15

GPS Coordinates: 36.926192, -108.143259

Legal Description: Unit L, Section 6, T31N, R12W; San Juan County

Incident #: NVF1829149123, 9/30/2018

Characterization Report

Lateral A-15 Line Leak Location





Depth to Water Determination

The nearest depth to water data was located 2,238 meters northwest, at an altitude of 5,812 feet and depth to ground water of 32 feet. Given that the release location is at an elevation of 5,841 feet, it is assumed that depth to ground water at the release location is approximately 61 feet.

Depth To Groundwater

POD Number	Well Depth (ft)	Depth to Water (ft)	Water Bearing Stratifications (ft)	Description		/ Direction teral A-15	Site Elevation (ft)
SJ 00835	34	19	32-34	Sandstone/Gravel/ Conglomerate	2238 mtrs	1.39 mi NW	5812

Source: http://nmwrrs.ose.state.nm.us/nmwrrs/meterReport.html



New Mexico Office of the State Engineer Water Column/Average Depth to Water

POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-	County	Q 64				Tws	Rna	x	Y	Distance	DESCRIPTION OF THE PERSON OF T	Depth \	STREET, STREET
SJ 00835	Cour	SJLP	SJ	A CONTRACTOR OF	380000	34390-12	STREET, SQUARE,	PERSONAL PROPERTY.	STREET, STREET	The second second second second	4092270*		THE REAL PROPERTY.	19	15
SJ 02590		SJLP	SJ	3	2	1	02	31N	13W	217099	4092201*	3056	114	70	44

Average Depth to Water:

44 feet

Minimum Depth:

19 feet

Maximum Depth: 70 feet

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 220021.83

Northing (Y): 4091305.44

Radius: 3200

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/12/18 9:45 AM

WATER COLUMN/ AVERAGE **DEPTH TO WATER**



New Mexico Office of the State Engineer **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

POD Number Well Tag

SJ 00835

Q64 Q16 Q4 Sec Tws Rng 2 2 02 31N 13W X

218002 4092270*

Driller License: 666

Driller Company:

GILBERT, JOHN G.

Driller Name:

GILBERT, JOHN G.

Drill Start Date:

11/20/1978

Water Bearing Stratifications:

Drill Finish Date: 11/29/1978 Plug Date:

Log File Date:

12/08/1978

6.00

PCW Rcv Date:

Source: Estimated Yield: 10 GPM

Shallow

Pump Type:

Pipe Discharge Size: Depth Well:

34 feet

Depth Water:

19 feet

Casing Size:

Top Bottom Description

32

34 Sandstone/Gravel/Conglomerate

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/12/18 9:46 AM

POINT OF DIVERSION SUMMARY

^{*}UTM location was derived from PLSS - see Help

Determination of water sources and significant watercourses within ½-mile of release

The closest significant watercourse to the site is the ephemeral stream located approximately 55 meters south-southeast of the site and marked by a dashed blue line on the imagery included below.

Water Sources within 1/2-mile

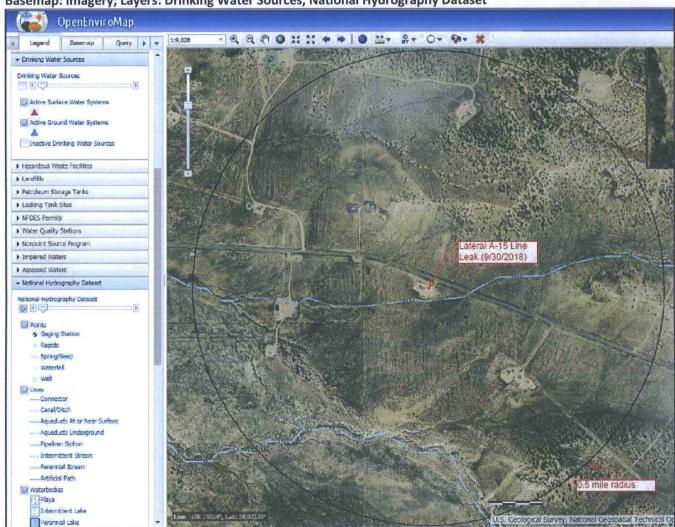
Lateral A-15 site elevation: 5841 feet

Location Name	Distance/Direct		Elevation (ft)
Ephemeral Stream 1	55 meters	S-SE	5835-5845
Ephemeral Stream 2	518 meters	S	5819

Source: https://gis.web.env.nm.gov/oem/

Location of Lateral A-15 Line Leak relative to Ephemeral Streams.

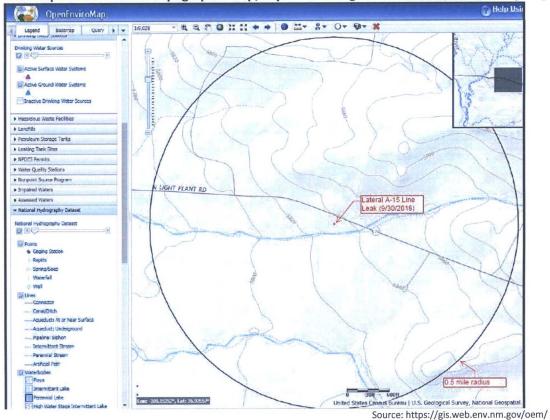
Basemap: Imagery; Layers: Drinking Water Sources, National Hydrography Dataset



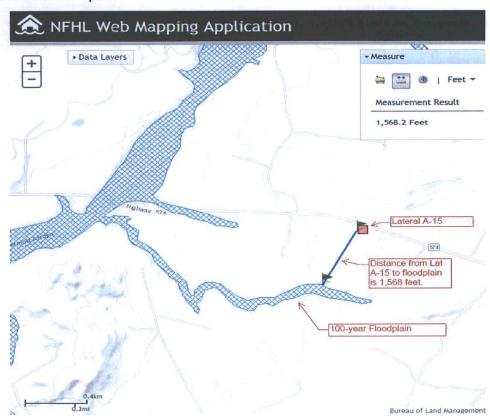
Source: https://gis.web.env.nm.gov/oem/

Location of Lateral A-15 Line Leak relative to Ephemeral Streams.

Basemap: USGS National Topographic Map; Layers: Drinking Water Sources, National Hydrography Dataset



Distance to Floodplain



Lateral A-15 Site Characterization Report-FIN.docx 5

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.11 NMAC
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
□ Description of remediation activities
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.
Printed Name: Kijun Hong Title: Environmental Specialist
Signature: Date:
email: khong@harvestmidstream.com Telephone: 505-436-8457
OCD Only Received by: 13 2019
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.
Closure Approved by: Date: 192019 Printed Name: Title: Equipmontal Decalist
Printed Name: Title: Kny: ronnoral Decalist

Harvest Midstream: Lateral A-15

GPS Coordinates: 36.926192, -108.143259

Legal Description: Unit L, Section 6, T31N, R12W; San Juan County

Incident #: NVF1829149123

Closure Report

On September 30, 2018, a pipeline failure on the Lateral A-15 caused the release of more than 25 barrels of produced water to the ground. An area approximately 70 feet long, 44 feet wide and 14 to 18 feet deep was excavated to ensure removal of affected soil. The nearest significant watercourse to the site is an ephemeral stream located about 180 feet south of the release location. Since the nearest significant watercourse is located less than 300 feet from the release location, closure criteria for a release less than 50 feet to ground water (per Table I of 19.15.29.12 NMAC) were applied. The excavation notes and analytical results are included in this report. A total of 470 yards of impacted soil and over-excavated soil were hauled from the site for proper disposal. The area was backfilled with clean fill material and the ground surface was restored to its original grade.

Excavation Notes and Field Data

Remediation Excavation and Sampling Form

Site Name <u>Lat</u>	17-15				
Excavation Dimens	ions (feet)				
70'	_ Length	44	Width <u>/ 4</u> 7	to 18'	Depth
Excavation Diagram (Depict notable site featu			vations, sample location	ons, north arrow,	etc.)
05	west Ea	15+ () 3e	8 Pipe A	.15	

Sample Information

OCD Witness Sampling (Yes)or No

Agency(s) Representative(s) <orey Smith

Sample ID	Sample Date	Type (Composite, Grab)	Location (Floor, Sidewall)	Comments
01	10-3-18	COMPOSITO	5ide wall5	
02	10-3-18	LOA Posite	5: 2c Walls	
03	18-3-18	Composite	side walls	
04	10-3-18	composite	side well'	
05-	10-3-18	composite	side wells	
west side	10-3-18	Composite	Floor	
Eastside		Composite	Floor	

Data table of Soil Contaminant Concentration

(Full lab report included as Attachment)

	dstream 5 Line Leak vered 9/30/2018							Sam	ole Date: 1	0/3/2018
EPA Method	Analyses	Closure	<=50 ft Criteria g/kg)	01 Sidewalls	02 Sidewalls	SOI 03 Sidewalls	04 Sidewalls	05 Sidewalls	West Bottom	East Bottom
300	Chloride	N/A	600	ND	ND	79	80	120	210	180
00451170	DRO	N/A		ND	ND	ND	ND	ND	ND	ND
8015M/D	MRO	N/A	100	ND	ND	ND	ND	ND	ND	ND
8015D	GRO	N/A		ND	ND	ND	ND	ND	ND	ND
	Benzene	10		ND	ND	ND	ND	ND	ND	ND
8021B	Toluene	N/A	50	ND	ND	ND	ND	ND	ND	ND
00Z I D	Ethylbenzene	N/A	30	ND	ND	ND	ND	ND	ND	ND
	Xylenes, total	N/A		ND	ND	ND	ND	ND	ND	ND

Excavation Photograph



ATTACHMENT



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

October 05, 2018

Kijun Hong Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413 TEL: (505) 632-4475

FAX

RE: Lateral A-15 Line Leak

OrderNo.: 1810254

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 7 sample(s) on 10/4/2018 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1810254

Date Reported: 10/5/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: 01 Sidewalls

Project:

Lateral A-15 Line Leak

Collection Date: 10/3/2018 11:00:00 AM

Lab ID: 1810254-001

Matrix: SOIL

Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	10/4/2018 10:46:49 AM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	Irm
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/4/2018 10:17:32 AM	40800
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/4/2018 10:17:32 AM	40800
Surr: DNOP	116	50.6-138		%Rec	1	10/4/2018 10:17:32 AM	40800
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	10/4/2018 9:41:31 AM	G54639
Surr: BFB	88.8	15-316		%Rec	1	10/4/2018 9:41:31 AM	G54639
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.018		mg/Kg	1	10/4/2018 9:41:31 AM	B54639
Toluene	ND	0.036		mg/Kg	1	10/4/2018 9:41:31 AM	B54639
Ethylbenzene	ND	0.036		mg/Kg	1	10/4/2018 9:41:31 AM	B54639
Xylenes, Total	ND	0.071		mg/Kg	1	10/4/2018 9:41:31 AM	B54639
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	10/4/2018 9:41:31 AM	B54639

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 1 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810254

Date Reported: 10/5/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: 02 Sidewalls

Project:

Lateral A-15 Line Leak

Collection Date: 10/3/2018 11:10:00 AM

Lab ID:

1810254-002

Matrix: SOIL

Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	30		mg/Kg	20	10/4/2018 10:59:13 AM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/4/2018 10:39:38 AM	40800
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/4/2018 10:39:38 AM	40800
Surr: DNOP	117	50.6-138		%Rec	1	10/4/2018 10:39:38 AM	40800
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	10/4/2018 10:04:10 AM	G54639
Surr: BFB	86.0	15-316		%Rec	1	10/4/2018 10:04:10 AM	G54639
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.019		mg/Kg	1	10/4/2018 10:04:10 AM	B54639
Toluene	ND	0.038		mg/Kg	1	10/4/2018 10:04:10 AM	B54639
Ethylbenzene	ND	0.038		mg/Kg	1	10/4/2018 10:04:10 AM	B54639
Xylenes, Total	ND	0.075		mg/Kg	1	10/4/2018 10:04:10 AM	B54639
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/4/2018 10:04:10 AM	B54639

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 11 J
- Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1810254

Date Reported: 10/5/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: 03 Sidewalls

Project: Lateral A-15 Line Leak

Collection Date: 10/3/2018 11:20:00 AM

Lab ID:

1810254-003

Matrix: SOIL

Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual Unit	s DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	79	30	mg/K	g 20	10/4/2018 11:11:37 AM	40802
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.7	mg/K	g 1	10/4/2018 11:01:36 AM	40800
Motor Oil Range Organics (MRO)	ND	48	mg/K	g 1	10/4/2018 11:01:36 AM	40800
Surr: DNOP	114	50.6-138	%Re	2 1	10/4/2018 11:01:36 AM	40800
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/K	g 1	10/4/2018 10:26:47 AM	G54639
Surr: BFB	85.6	15-316	%Re	1	10/4/2018 10:26:47 AM	G54639
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.019	mg/K	g 1	10/4/2018 10:26:47 AM	B54639
Toluene	ND	0.038	mg/K	g 1	10/4/2018 10:26:47 AM	B54639
Ethylbenzene	ND	0.038	mg/K	g 1	10/4/2018 10:26:47 AM	B54639
Xylenes, Total	ND	0.076	mg/K	g 1	10/4/2018 10:26:47 AM	B54639
Surr: 4-Bromofluorobenzene	102	80-120	%Red	1	10/4/2018 10:26:47 AM	B54639

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 3 of 11 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1810254

Date Reported: 10/5/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: 04 Sidewalls

Project: Lateral A-15 Line Leak

Lab ID: 1810254-004 Collection Date: 10/3/2018 11:30:00 AM

Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	80	30	mg/Kg	20	10/4/2018 11:24:02 AM	
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	10/4/2018 11:23:49 AM	40800
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/4/2018 11:23:49 AM	40800
Surr: DNOP	120	50.6-138	%Rec	1	10/4/2018 11:23:49 AM	40800
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	10/4/2018 10:49:24 AM	G54639
Surr: BFB	85.6	15-316	%Rec	1	10/4/2018 10:49:24 AM	G54639
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.020	mg/Kg	1	10/4/2018 10:49:24 AM	B54639
Toluene	ND	0.041	mg/Kg	1	10/4/2018 10:49:24 AM	B54639
Ethylbenzene	ND	0.041	mg/Kg	1	10/4/2018 10:49:24 AM	B54639
Xylenes, Total	ND	0.081	mg/Kg	1	10/4/2018 10:49:24 AM	B54639
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	10/4/2018 10:49:24 AM	B54639

Matrix: SOIL

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 11 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1810254

Date Reported: 10/5/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Project: Lateral A-15 Line Leak

Lab ID: 1810254-005

Matrix: SOIL

Client Sample ID: 05 Sidewalls

Collection Date: 10/3/2018 11:40:00 AM

Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	120	30		mg/Kg	20	10/4/2018 11:36:27 AM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	Irm
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/4/2018 11:45:41 AM	40800
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/4/2018 11:45:41 AM	40800
Surr: DNOP	120	50.6-138		%Rec	1	10/4/2018 11:45:41 AM	40800
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	10/4/2018 11:12:05 AM	G54639
Surr: BFB	87.2	15-316		%Rec	1	10/4/2018 11:12:05 AM	G54639
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.022		mg/Kg	1	10/4/2018 11:12:05 AM	B54639
Toluene	ND	0.044		mg/Kg	1	10/4/2018 11:12:05 AM	B54639
Ethylbenzene	ND	0.044		mg/Kg	1	10/4/2018 11:12:05 AM	B54639
Xylenes, Total	ND	0.087		mg/Kg	1	10/4/2018 11:12:05 AM	B54639
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/4/2018 11:12:05 AM	B54639

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 5 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810254

Date Reported: 10/5/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: West Bottom

Project: Lateral A-15 Line Leak

Collection Date: 10/3/2018 11:50:00 AM

Lab ID:

1810254-006

Matrix: SOIL

Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	210	30	mg/Kg	20	10/4/2018 11:48:52 AM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst	Irm
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/4/2018 9:41:42 AM	40800
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/4/2018 9:41:42 AM	40800
Surr: DNOP	97.4	50.6-138	%Rec	1	10/4/2018 9:41:42 AM	40800
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	10/4/2018 11:34:52 AM	G54639
Surr: BFB	86.0	15-316	%Rec	1	10/4/2018 11:34:52 AM	G54639
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.020	mg/Kg	1	10/4/2018 11:34:52 AM	B54639
Toluene	ND	0.040	mg/Kg	1	10/4/2018 11:34:52 AM	B54639
Ethylbenzene	ND	0.040	mg/Kg	1	10/4/2018 11:34:52 AM	B54639
Xylenes, Total	ND	0.081	mg/Kg	1	10/4/2018 11:34:52 AM	B54639
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	10/4/2018 11:34:52 AM	B54639

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 11 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1810254

Date Reported: 10/5/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: East Bottom

Project: Lateral A-15 Line Leak Collection Date: 10/3/2018 12:00:00 PM

Lab ID: 1810254-007 Matrix: SOIL Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	180	30	mg/Kg	20	10/4/2018 12:01:16 PM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	10/4/2018 10:06:15 AM	40800
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/4/2018 10:06:15 AM	40800
Surr: DNOP	96.7	50.6-138	%Rec	1	10/4/2018 10:06:15 AM	40800
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	10/4/2018 11:57:34 AM	G54639
Surr: BFB	88.4	15-316	%Rec	1	10/4/2018 11:57:34 AM	G54639
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.017	mg/Kg	1	10/4/2018 11:57:34 AM	B54639
Toluene	ND	0.033	mg/Kg	1	10/4/2018 11:57:34 AM	B54639
Ethylbenzene	ND	0.033	mg/Kg	1	10/4/2018 11:57:34 AM	B54639
Xylenes, Total	ND	0.067	mg/Kg	1	10/4/2018 11:57:34 AM	B54639
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	10/4/2018 11:57:34 AM	B54639

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 7 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810254

05-Oct-18

Client:

Harvest

Project:

Lateral A-15 Line Leak

Sample ID MB-40802

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 40802

PQL

RunNo: 54642

Prep Date: 10/4/2018 Analysis Date: 10/4/2018

SeqNo: 1813615

Units: mg/Kg

Analyte Chloride

Result ND

SPK value SPK Ref Val %REC

SPK value SPK Ref Val

LowLimit

HighLimit

%RPD

RPDLimit

Qual

Sample ID LCS-40802

SampType: Ics

TestCode: EPA Method 300.0: Anions RunNo: 54642

Client ID: Prep Date: 10/4/2018

LCSS

Batch ID: 40802

PQL

Analyte

Analysis Date: 10/4/2018

SeqNo: 1813616 %REC

Units: mg/Kg

HighLimit %RPD **RPDLimit** Qual

Chloride

1.5 15.00

94.0

LowLimit

110

14

90

Qualifiers:

D

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits

Page 8 of 11

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810254

05-Oct-18

Client:

Harvest

Project:

Lateral A-15 Line Leak

Sample ID LCS-40800	SampType: LCS			SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 40800 RunNo: 54634										
Prep Date: 10/4/2018	Analysis D	ate: 10)/4/2018	SeqNo: 1812298			Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	51	10	50.00	0	103	70	130				
Surr: DNOP	5.4		5.000		109	50.6	138				

Sample ID MB-40800	SampT	ype: ME	BLK	Test	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch	ID: 408	800	R	RunNo: 5	4634				
Prep Date: 10/4/2018	Analysis Da	ate: 10	/4/2018	S	SeqNo: 1	812299	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		108	50.6	138			

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
- PQL Practical Quanitative Limit
- 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

Page 9 of 11

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810254

05-Oct-18

Client:

Harvest

Project:

Lateral A-15 Line Leak

Sample ID RB Client ID: PBS Prep Date:

SampType: MBLK Batch ID: **G54639** TestCode: EPA Method 8015D: Gasoline Range

15

LowLimit

RunNo: 54639

Analysis Date: 10/4/2018

SeqNo: 1812839 Units: mg/Kg

HighLimit LowLimit %RPD

Analyte Result PQL Gasoline Range Organics (GRO) ND 5.0

1000

SPK value SPK Ref Val

86.2

316

RPDLimit

Qual

Surr: BFB

860

Sample ID 2.5UG GRO LCS

SampType: LCS

%REC

TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS

Batch ID: **G54639**

5.0

RunNo: 54639

Analyte

Analysis Date: 10/4/2018 Result

SeqNo: 1812840

Units: mg/Kg HighLimit

%RPD

Gasoline Range Organics (GRO)

25 1100

Result

Result

16

740

18

25.00 0 1000

SPK value SPK Ref Val

SPK value SPK Ref Val

17.87

714.8

%REC 99.0 107

75.9 131 15 316 **RPDLimit** Qual

Surr: BFB

Prep Date:

Sample ID 1810254-001AMS

SampType: MS

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

01 Sidewalls

Batch ID: **G54639**

RunNo: 54639

%RPD

Analyte Gasoline Range Organics (GRO)

Prep Date:

Analysis Date: 10/4/2018 PQL

SegNo: 1812841 %REC

77.8

15

LowLimit

Units: mg/Kg

316

HighLimit 128 **RPDLimit** Qual

Surr: BFB

Sample ID 1810254-001AMSD

750 SampType: MSD

TestCode: EPA Method 8015D: Gasoline Range

98.0

105

Client ID: 01 Sidewalls

Batch ID: G54639

3.6

RunNo: 54639

Prep Date: Analyte

Analysis Date: 10/4/2018

SeqNo: 1812842

88.8

104

Units: mg/Kg

%RPD **RPDLimit** Qual

Gasoline Range Organics (GRO) Surr: BFB

PQL 3.6 17.87 714.8

SPK value SPK Ref Val %REC n

0

LowLimit 77.8 15

HighLimit 128 316

9.76 0

20 0

Qualifiers:

H

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit Practical Quanitative Limit POL
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Page 10 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810254

05-Oct-18

Client:

Harvest

Project:

Lateral A-15 Line Leak

Sample ID RB	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	ID: B5	4639	F	RunNo: 5	4639				
Prep Date:	Analysis D	ate: 10	0/4/2018	S	SeqNo: 1	812865	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			
Sample ID 100NG BTEX LCS	SampT	ype: LC	S	Test	Code: El	PA Method	8021B: Volati	les		
Client ID: LCSS	Batch	ID: B5	4639	R	unNo: 5	4639				
Prep Date:	Analysis Da	ate: 10	0/4/2018	S	eqNo: 1	812866	Units: mg/K	g		

Client ID: LCSS	Batch	n ID: B5	4639	F	RunNo: 5	4639				
Prep Date:	Analysis D	ate: 10	0/4/2018	S	SeqNo: 1	812866	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.0	77.3	128			
Toluene	1.0	0.050	1.000	0	103	79.2	125			
Ethylbenzene	0.99	0.050	1.000	0	98.8	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	98.6	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID 1810254-002	AMS Sam	рТуре: М	3	Tes	tCode: E	PA Method	8021B: Vola	tiles			
Client ID: 02 Sidewalls	Ва	tch ID: B5	4639	F	RunNo: 54639						
Prep Date:	Analysis	Date: 10	0/4/2018	8	SeqNo: 1	812867	Units: mg/k	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.80	0.019	0.7530	0.003818	105	68.5	133				
Toluene	0.82	0.038	0.7530	0.003230	108	75	130				
Ethylbenzene	0.79	0.038	0.7530	0	105	79.4	128				
Xylenes, Total	2.3	0.075	2.259	0	104	77.3	131				
Surr: 4-Bromofluorobenzene	0.79		0.7530		105	80	120				

Sample ID 1810254-002AM	SD SampT	ype: MS	SD	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: 02 Sidewalls	Batch	1D: B5	4639	F	RunNo: 5	4639				
Prep Date:	Analysis D	ate: 10	/4/2018	S	SeqNo: 1	812868	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.74	0.019	0.7530	0.003818	97.9	68.5	133	7.10	20	
Toluene	0.77	0.038	0.7530	0.003230	102	75	130	6.25	20	
Ethylbenzene	0.73	0.038	0.7530	0	97.6	79.4	128	7.52	20	
Xylenes, Total	2.2	0.075	2.259	0	96.9	77.3	131	6.77	20	
Surr: 4-Bromofluorobenzene	0.80		0.7530		106	80	120	0	0	

- * 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
- PQL Practical Quanitative Limit
- 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
- Page 11 of 11

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	WILLIAMS FIELD SERVI	Work Order Number:	181	0254			ReptNo	: 1
Received By:	Anne Thorne	10/4/2018 6:45:00 AM			am	1.	••••	
Completed By:	Anne Thome	10/4/2018 6:55:05 AM			1	A.		
Reviewed By:	LB	614/18			am	e siz		
Lablett	4. As 10104117							
Chain of Cust	1							
1. Is Chain of Cu			Yes	✓	No		Not Present	
2. How was the s			Cou					
Log In								
	ot made to cool the samples?		Yes	✓	No		NA 🗆	
4. Were all sample	les received at a temperature	of >0° C to 6.0°C	Yes	✓	No		NA 🗆	
5. Sample(s) in p	roper container(s)?		Yes	✓	No			
6. Sufficient samp	ole volume for indicated test(s)	?	Yes	✓	No			
7. Are samples (e.	xcept VOA and ONG) properly	preserved?	Yes	✓	No			
8. Was preservati	ve added to bottles?		Yes		No	v	NA 🗆	
9. VOA vials have	zero headspace?		Yes		No		No VOA Vials	
10. Were any samp	ple containers received broker	?	Yes		No	V	# - !	
				_		_	# of preserved bottles checked	
	k match bottle labels? icles on chain of custody)	,	Yes	✓	No		for pH:	>12 unless noted)
	rectly identified on Chain of C	Sustady?	Yes	V	No	пΙ	Adjusted?	>12 diffess floted)
	analyses were requested?		Yes	V	No			
	times able to be met?	,	Yes	✓	No		Checked by:	
(If no, notify cus	stomer for authorization.)					Ĺ		
Special Handlin	g (if applicable)					100		
15, Was client notif	fied of all discrepancies with the	is order?	Yes		No		NA 🗹	
Person N	otified:	Date	US SECTION 1	THE RESIDENCE AND PARTY OF THE PARTY.	Abrill Middlesson	DESTRUCTION Y		
By Whom	1:	Via:	eMa	il Phon	ie 🗌	Fax	In Person	
Regarding	g:	ACCIONATION DE LA CONTRACTION DEL CONTRACTION DE LA CONTRACTION DE	Minist Accesses					
Client Ins	tructions:		- Lacontana vida	Maltanua aroanu outana a		MANAGE.	CONTROL CONTRO	
16. Additional rema	arks:							
7. Cooler Inform	ation _							
Cooler No	Temp °C Condition Sea	l Intact Seal No Se	al Da	ité Sig	ned E	у		
1	1.3 Good Yes				Het week some			

	Chain	-of-Cı	stody Record	Turn-Around	Turn-Around Time:					200												*
Cliant		Harve		☐ Standard		h <u>sameda</u>	Y													NT		•
Mailing	Addro on		*	- Toject Wallie	J.			"		7	٧	vww.	halle	envir	ronm	enta	al.co	m				
iviailing	Address	1755	ARROYO PR	Lateral Project #:	A-15 L	ive he	ak	4901 Hawkins NE - Albuquerque, NM 87109														
BIC	OMF	icld	Nm 874/3	Project #:				Tel. 505-345-3975 Fax 505-345-4107														
			- 4475					Analysis Request														
email o	r Fax#: /	KIJUN-	HONG @Williams. Com	Project Mana	iger:		*	-	nly)	30)					(4)			\Box			T	T
	Package:			1/2	. 1			TMB's (8021)	as o	M			(S)		, S(PCB's						
□ Stan			☐ Level 4 (Full Validation)	Kijun Hong			3,8 (<u>(G</u>	8			SIMS)		PC,	2 P(
Accredi		□ Othe	er		Sampler: Morgan Killion Online Yes No			TIME	直		-		8270		2	808			ار			2
□ EDD		- Othe	,1	Onuce: Sample (en)				+	+	380	418	204	or 8.	0	Ş	/ se		OA)	-3			or
Date	Time	Matrix	Sample Request ID	A 10/04/19 Container Type and #	Preservative Type	e Silvi	•No/s	BTEX + M TBE	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	C/100			Air Bubbles (Y or N)
10/3/18	1100	Sail	DI Side walls	1-402	Cosl		701	m X	B	X	F	Ш		~	₹	8	8	88	X	+	1.	¥
10/3/18	1120	3011	02 sidewalls	1-402	1		702	V		X	+	+	+	\top	\top	\dashv	\dashv	\dashv	X	_	+	+
10/3/18	1/20	Soil	03 Sidewalls	1-402			763	→	\dashv	$\overrightarrow{\chi}$		+	+	+	+	\dashv	\dashv	\dashv	$\frac{\lambda}{\chi}$	+	+	+
0/3/10	1130		O4 sidewalls	1-402			TOY	V		$\frac{1}{\lambda}$	+	+	+	+		\dashv	+	\dashv	$\frac{\Lambda}{\chi}$	+	+	+
0/3/18	-	Soil	05 Sidewalls	1-402			705	χ	-	$\frac{1}{\chi}$		+	+	+	+	+	-	\dashv	$\frac{\lambda}{\chi}$	+	+	+
10/3/18			West Bottom	1-402			706	X		$\frac{1}{X}$	+	+	+	+	+	+	-	+	$\frac{1}{\chi}$	+	+	+
10/3/18	1200		Fast Bottom	1-402	₩		701	1		X	+	+	+	+	+	+	+	\dashv	X	+	+	+
	1000		E43+ P011-111	7 100				^										1	\uparrow	\pm		
									-	-		+	+	+	+	+	-	+	+	+	+	H
										1			+	1		_			\downarrow	#	#	
Date:	Time:	Relinquish	ed by:	Received by:		Date	Time	Rem	narks	 ::												Щ
P(3/ /g Date:	Time:	Relinguish	od by: Killion ed by:	Received by	Haet	10/3/18 Date	Jyllo Time															
0/3/18	1817	19/1	estulial !	(Illi	wh	10/04/18 06/5																
If	necessary,	samples subr	mitted to Hall Environmental may be subco	ontracted to other ac	credited laboratori	es. This serves a	s notice of this	possib	ility. A	ny sub	-contra	cted d	ata wi	ll be c	learly	notate	d on t	he an	alytical	report.		

District I
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

Pipeline failure due to corrosion.

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

			•		•						
Responsible 1	Party	Harvest Four C	orners, LLC	OGRID	37388						
Contact Nam	е	Kijun Hong		Contact	Contact Telephone (505) 632-4475						
Contact emai	1 .	khong@harvest	midstream.com	Inciden	Incident # (assigned by OCD) NVF1829148087						
Contact maili	ing address	1755 Arroyo Dr.	, Farmington, N	M 87413							
			Location	of Release	Source						
atitude		36.60455	(NAD 83 in dec	Longitud	e	07.84971					
Site Name	MN Galt			Site Typ	e Pipeline						
Date Release 1	Discovered	10/4/2018			applicable)						
*****						NMOCD					
Unit Letter	Section	Township	Range		unty						
E	1	27N	10W	San	Juan	JAN 0 3 2019					
urface Owner	: State	⊠ Federal □ Tri	bal Private (Λ	Name:		DISTRICT III					
			Nature and	Volume of	Release	(Street)					
	Material	l(s) Released (Select all	that apply and attach	calculations or speci	fic justification for the v	volumes provided below)					
Crude Oil		Volume Released	(bbls)	•	Volume Recov						
Produced \	Water	Volume Released	(bbls)		Volume Recov	rered (bbls)					
5		Is the concentrati produced water >		nloride in the	Yes No						
Condensate	e	Volume Released			Volume Recov	ered (bbls)					
Natural Ga	ıs	Volume Released	(Mcf) 4.32 MCF	7	Volume Recov	ered (Mcf) 0					
Other (describe) Volume/Weight Released (provide unit				units)	Volume/Weigh	at Recovered (provide units)					
Cause of Relea	ase										

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major	If VFS for what reason(s) does the	ne reconneible no	arty consider this a major release?
release as defined by	in 123, for what reason(s) does the	ne responsible pa	arty consider this a major release?
19.15.29.7(A) NMAC?	Unauthorized natural gas relea	en la a dans con d	
13.13.23.7(11) 1411111.	investigation shows this to be a	se iii a dry wasi	n with reasonable potential to impact the wash. Initial
⊠ Yes □ No	investigation shows this to be a	gas only release	e with no inquitas.
If YES, was immediate no	otice given to the OCD? By whom	? To whom? W	hen and by what means (phone, email, etc)?
	<i>y</i>	. 10 ////////// //	men and by what means (phone, eman, etc):
Yes, Kijun Hong notified	d Cory Smith, Vanessa Fields, an	d Jim Griswold	l (OCD) by email on 10/5/2018 @ 9:56 am.
	Init	tial Respon	se
T1		_	
The responsible p	party must undertake the following actions is	mmediately unless th	ney could create a safety hazard that would result in injury
The source of the rele	ase has been stopped		
Account to	s been secured to protect human her		
Released materials ha	ve been contained via the use of be	rms or dikes, abs	sorbent pads, or other containment devices.
	coverable materials have been remo		_
			ed appropriately.
If all the actions described	above have <u>not</u> been undertaken, e	explain why:	
			77 ° 15 ° 1
Por 10 15 20 9 D (4) ND4	A C 41		
has begun places attach a	AC the responsible party may com	nence remediation	on immediately after discovery of a release. If remediation
within a lined containment	t area (see 10.15.20.11(A)(5)(a) NA	medial efforts ha	ave been successfully completed or if the release occurred
			ach all information needed for closure evaluation.
I hereby certify that the information	mation given above is true and complet	e to the best of my	y knowledge and understand that pursuant to OCD rules and
regulations all operators are r	equired to report and/or file certain rele	ease notifications a	and perform corrective actions for releases which may endanger
failed to adequately investigate	te and remodiate contemination that re	by the OCD does	not relieve the operator of liability should their operations have
addition, OCD acceptance of	a C-141 report does not relieve the one	se a inreat to group	ndwater, surface water, human health or the environment. In ility for compliance with any other federal, state, or local laws
and/or regulations.	a contract does not remove the ope	rator of responsible	mity for compliance with any other lederal, state, or local laws
Printed Name: Kijui	n Hong	Title:	Environmental Specialist
C:	11-112		
Signature:	A HOLL	Date:	10/16/2018
amail: libana@ba		m 1 1	
Knong(a)narves	tmidstream.com	Telephone:	505-436-8457
OCD Only			
Received by:		Date:	

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	65(ft bgs)					
Did this release impact groundwater or surface water?						
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?						
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No					
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No					
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?						
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No					
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?						
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No					
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No					
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No					
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No					
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ⊠ No					
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertice contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	cal extents of soil					
Characterization Report Checklist: Each of the following items must be included in the report.						
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information Topographic/Aerial maps						
Laboratory data including chain of custody						

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete regulations all operators are required to report and/or file certain relepublic health or the environment. The acceptance of a C-141 report failed to adequately investigate and remediate contamination that post addition, OCD acceptance of a C-141 report does not relieve the operand/or regulations.	ase notifications by the OCD does se a threat to gro	and perform corrective actions for releases which may endanger s not relieve the operator of liability should their operations have undwater, surface water, human health or the environment. In
Printed Name: Kijun Hong	Title:	Environmental Specialist
Signature:	Date:	12/27/2018
email: <u>khong@harvestmidstream.com</u>	Telephone: _	505-436-8457
OCD Only		
Received by:		Date:

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.11 NMAC
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
☐ Description of remediation activities
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.
Printed Name: Kijun Hong Title: Environmental Specialist
Signature: Date:
email: <u>khong@harvestmidstream.com</u> Telephone: <u>505-436-8457</u>
OCD Only Received by: Vorossa Fields Date: 13 2019
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.
Printed Name: Crosso Fields Date: 19209 Title: Coverage Approved by: Date: 19209

Harvest Midstream: MN Galt

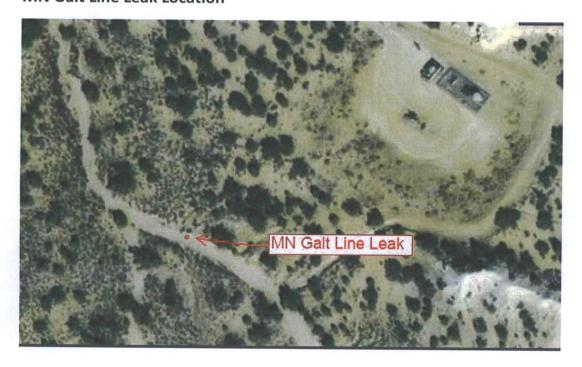
GPS Coordinates: 36.60455, -107.84971

Legal Description: Unit E, Section 6, T27N, R10W; San Juan County

Incident #: NVF1829148087; 10/4/2018

CHARACTERIZATION REPORT

MN Galt Line Leak Location





Depth to Water Determination

The nearest depth to water data was located 1,361 meters southwest, at an altitude of 6,007 feet and depth to ground water of 50 feet. Given that the release location is at an elevation of 6,017 feet, it is assumed that depth to ground water at the release location is approximately 60 feet.

POD Number	Well Depth (ft)	Depth to Water (ft)	Water Bearing Stratifications (ft)	Description		/ Direction MN Galt	Well Site Elevation (ft)	
SJ 04045	310	50	145-180 240-285	Sandstone/Gravel/ Conglomerate	1361 mtrs	0.88 mi SW	6007	

Source: http://nmwrrs.ose.state.nm.us/nmwrrs/meterReport.html



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

		POD		45											
		Sub-		Silver.	Q	State of							Depth	Depth 1	Water
POD Number	Code	basin	County	64	116	4	Sec	Tws	Rng	X	Y	Distance	BOARD OF THE PERSON NAMED IN	TO A COLUMN THE REAL PROPERTY.	
SJ 04045 POD1		SJ	SJ	1	4	2	11	27N	10W	244148	4053538	1415	310	50	260

Average Depth to Water:

50 feet

Minimum Depth:

50 feet

Maximum Depth:

50 feet

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 244738.78

Northing (Y): 4054825.21

Radius: 1500

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

12/4/18 4:53 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



Well Tag

New Mexico Office of the State Engineer **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(NAD83 UTM in meters) (quarters are smallest to largest)

Q64 Q16 Q4 Sec Tws Rng

X

SJ 04045 POD1 1 4 2 11 27N 10W 244148 4053538

Driller License: 717

Driller Company:

WESTERN WATER WELLS

Driller Name:

HOOD, TERRY

Drill Start Date: 09/15/2013

Drill Finish Date:

09/25/2013

Plug Date:

Log File Date:

10/01/2013

PCW Rcv Date:

Source:

Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield: 7 GPM

Casing Size:

5.00

POD Number

Depth Well:

310 feet

Depth Water:

50 feet

Water Bearing Stratifications:

Top Bottom Description 145 180

Sandstone/Gravel/Conglomerate Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom 0 3

240

3 12

12 48 48 80

80 145

145 180 180 240

285 240 285 310

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

12/4/18 4:53 PM

POINT OF DIVERSION SUMMARY

Determination of water sources and significant watercourses within ½-mile of release

The natural gas release occurred within a dry wash, listed below as "Ephemeral Stream 1", and marked by a dashed blue line on the topo map included below.

Water Sources within 1/2- Mile of MN Galt

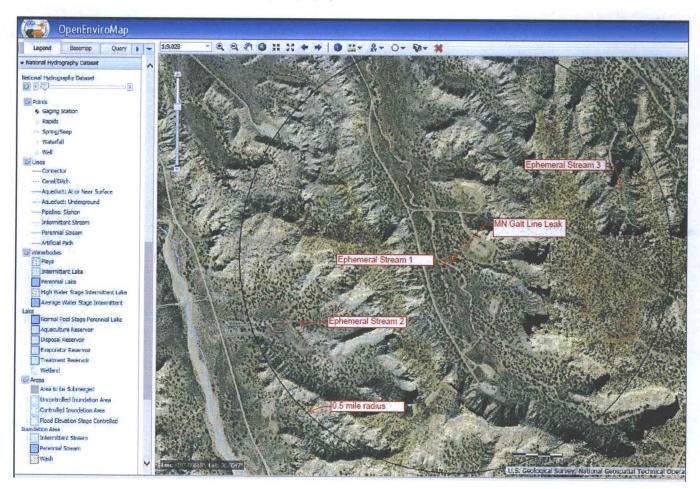
MN Galt site elevation: 6017 feet

Location Name		/ Direction MN Galt	Site Elevation (ft)		
Ephemeral Stream 1	0 ft	SW	6017		
Ephemeral Stream 2	0.35 mi	SW	5982		
Ephemeral Stream 3	0.4	NE	6131		

Location of MN Galt Line Leak relative to Ephemeral Streams.

Basemap: Imagery

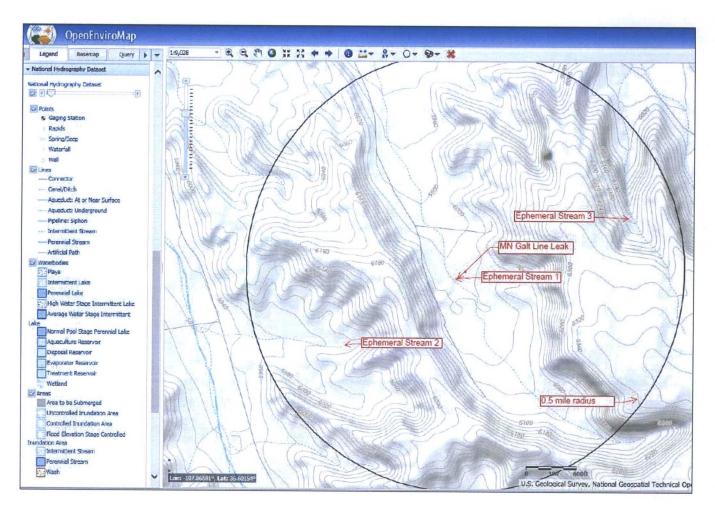
Layers: Drinking Water Sources, National Hydrography Dataset



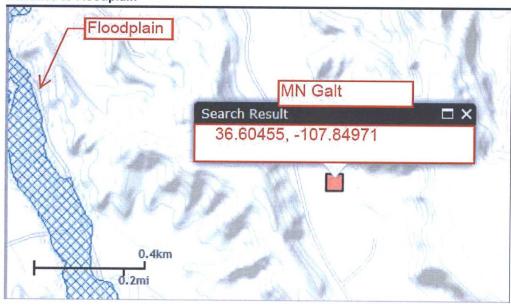
Location of MN Galt Line Leak relative to Ephemeral Streams.

Basemap: USGS National Map

Layers: Drinking Water Sources, National Hydrography Dataset



Distance to Floodplain



Harvest Midstream: MN Galt

GPS Coordinates: 36.60455, -107.84971

Legal Description: Unit E, Section 6, T27N, R10W; San Juan County

Incident #: NVF1829148087; 10/4/2018

CLOSURE REPORT

On October 4, 2018, a pipeline failure due to corrosion on the MN Galt which caused the release of natural gas was discovered. There was no release of liquid hydrocarbons associated with this event. An area approximately 80 feet long, 8 feet wide and 7 feet deep was excavated to ensure removal of potentially affected soil. Analytical results from all samples taken were below the remediation standard. As such, the excavated soil was returned to the pit and the ground surface was restored to its original grade.

Since the location of the pipeline leak was within a dry wash, closure criteria for a release less than 50 feet to ground water (per Table I of 19.15.29.12 NMAC) were applied. The excavation notes and analytical results are included in this report. Analytical results show that the closure requirement criteria has been met and no further action is required.

Excavation Notes and Field Data

Remediation Excavation and Sampling Form

Site Name _1401/	GoH-Fel			and the same of th	
Excavation Dimens	ons (feet)				
80	_Length	Þ	Width	7	Depth
Excavation Diagram Depict notable site featu	-		vations, sample lo	cations, north ar	row, etc.)
North X X X X X X X X X X X X X X X X X X X	X Middle- X X X ZCLKGRCO	x_	1c-025	X 8	of the side wa

Sample Information

OCD Witness Sampling (Yes or No

Agency(s) Representative(s) Lore 4 5m:+L

Sample ID	Sample Date	Type (Composite, Grab)	Location (Floor, Sidewall)	Comments
NorthENL	10-11-18	Composite	Both	
middle 01	18-11	composite	Both	-
middle oa	10-11	composite	Both	
- 1	16-11	Composite	Both	
stockpile	18-11	composite	Stockpile	
	,	,	01 .1	

Data table of Soil Contaminant Concentration

(Full lab report included as Attachment)

Harvest N	/lidstream							
MN Galt I	Line Leak					Sampl	e Date: 10	0/11/2018
Date Disc	overed 10/4/20)18						
EPA		DTGW	<= 50 ft	Aı	nalytic Re	sults - Soi	Sample	ID
Method	Analyses	Closure Criteria (mg/kg)		North End	Middle 01	Middle 02	South End	Stock Pile
300	Chloride	n/a	600	ND	ND	ND	ND	120
8015M/D	DRO	n/a		ND	ND	ND	ND	11
OU IOIVI/D	MRO	n/a	100	ND	ND	ND	ND	85
8015D	GRO	n/a		ND	ND	ND	ND	ND
	Benzene	10		ND	ND	ND	ND	ND
8021B	Toluene	n/a	50	ND	ND	ND	ND	ND
002 ID	Ethylbenzene	n/a	50	ND	ND	ND	ND	ND
-	Xylenes, total	n/a		ND	ND	ND	ND	ND
	Source: Ha	all Environ	mental A	nalysis La	boratory La	teral A-15	Report (10	

Excavation Photograph





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

October 15, 2018

Kijun Hong Harvest 1755 Arroyo Dr. Bloomfield, NM 87413 TEL: (505) 632-4475

FAX

RE: Galt MN F-1 Line Leak

OrderNo.: 1810740

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 5 sample(s) on 10/12/2018 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Only

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1810740

Date Reported: 10/15/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: North End

Project: Galt MN F-1 Line Leak Collection Date: 10/11/2018 9:00:00 AM

Lab ID: 1810740-001

Matrix: MEOH (SOIL)

Received Date: 10/12/2018 8:07:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	ND	30		mg/Kg	20	10/12/2018 12:14:53 PM 40974
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst: Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/12/2018 10:16:51 AM 40973
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/12/2018 10:16:51 AM 40973
Surr: DNOP	118	50.6-138		%Rec	1	10/12/2018 10:16:51 AM 40973
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	10/12/2018 11:19:51 AM R54829
Surr: BFB	87.2	15-316		%Rec	1	10/12/2018 11:19:51 AM R54829
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.017		mg/Kg	1	10/12/2018 11:19:51 AM B54829
Toluene	ND	0.035		mg/Kg	1	10/12/2018 11:19:51 AM B54829
Ethylbenzene	ND	0.035		mg/Kg	1	10/12/2018 11:19:51 AM B54829
Xylenes, Total	ND	0.069		mg/Kg	1	10/12/2018 11:19:51 AM B54829
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	10/12/2018 11:19:51 AM B54829

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 11 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1810740

Date Reported: 10/15/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: Middle 01

Project: Galt MN F-1 Line Leak Collection Date: 10/11/2018 9:10:00 AM

Lab ID: 1810740-002

Matrix: MEOH (SOIL)

Received Date: 10/12/2018 8:07:00 AM

Analyses	Result	PQL	Qual U	Jnits	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	ND	30	n	ng/Kg	20	10/12/2018 12:52:05 PM 40974
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst: Irm
Diesel Range Organics (DRO)	ND	9.9	n	ng/Kg	1	10/12/2018 10:41:11 AM 40973
Motor Oil Range Organics (MRO)	ND	50	n	ng/Kg	1	10/12/2018 10:41:11 AM 40973
Surr: DNOP	104	50.6-138	%	6Rec	1	10/12/2018 10:41:11 AM 40973
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.6	m	ng/Kg	1	10/12/2018 11:42:38 AM R54829
Surr: BFB	89.1	15-316	%	6Rec	1	10/12/2018 11:42:38 AM R54829
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.018	m	ng/Kg	1	10/12/2018 11:42:38 AM B54829
Toluene	ND	0.036	m	ng/Kg	1	10/12/2018 11:42:38 AM B54829
Ethylbenzene	ND	0.036	m	ng/Kg	1	10/12/2018 11:42:38 AM B54829
Xylenes, Total	ND	0.071	m	ng/Kg	1	10/12/2018 11:42:38 AM B54829
Surr: 4-Bromofluorobenzene	103	80-120	%	Rec	1	10/12/2018 11:42:38 AM B54829

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 11 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1810740

Date Reported: 10/15/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: Middle 02

Project: Galt M

Galt MN F-1 Line Leak

Collection Date: 10/11/2018 9:15:00 AM

Lab ID: 18107

1810740-003

Matrix: MEOH (SOIL)

Received Date: 10/12/2018 8:07:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	30	mg/Kg	20	10/12/2018 1:04:30 PM 40974
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: Irm
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	10/12/2018 11:29:47 AM 40973
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/12/2018 11:29:47 AM 40973
Surr: DNOP	103	50.6-138	%Rec	1	10/12/2018 11:29:47 AM 40973
EPA METHOD 8015D: GASOLINE RANGE					Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	10/12/2018 12:05:27 PM R54829
Surr: BFB	88.6	15-316	%Rec	1	10/12/2018 12:05:27 PM R54829
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.017	mg/Kg	1	10/12/2018 12:05:27 PM B54829
Toluene	ND	0.034	mg/Kg	1	10/12/2018 12:05:27 PM B54829
Ethylbenzene	ND	0.034	mg/Kg	1	10/12/2018 12:05:27 PM B54829
Xylenes, Total	ND	0.068	mg/Kg	1	10/12/2018 12:05:27 PM B54829
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	10/12/2018 12:05:27 PM B54829

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

- 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
- PQL Practical Quanitative Limit
- 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 Page 3 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810740

Date Reported: 10/15/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: South End

Project: Galt MN F-1 Line Leak

Collection Date: 10/11/2018 9:20:00 AM

Lab ID: 1810740-004

Matrix: MEOH (SOIL)

Received Date: 10/12/2018 8:07:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed E	Batch
EPA METHOD 300.0: ANIONS					Analyst: N	MRA
Chloride	ND	30	mg/Kg	20	10/12/2018 1:16:55 PM	40974
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: I	lrm
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	10/12/2018 11:54:08 AM 4	40973
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	10/12/2018 11:54:08 AM 4	40973
Surr: DNOP	108	50.6-138	%Rec	1	10/12/2018 11:54:08 AM 4	40973
EPA METHOD 8015D: GASOLINE RANGE					Analyst: F	RAA
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	10/12/2018 12:28:14 PM F	R54829
Surr: BFB	95.6	15-316	%Rec	1	10/12/2018 12:28:14 PM F	R54829
EPA METHOD 8021B: VOLATILES					Analyst: F	RAA
Benzene	ND	0.018	mg/Kg	1	10/12/2018 12:28:14 PM E	B54829
Toluene	ND	0.035	mg/Kg	1	10/12/2018 12:28:14 PM E	B54829
Ethylbenzene	ND	0.035	mg/Kg	1	10/12/2018 12:28:14 PM E	B54829
Xylenes, Total	ND	0.071	mg/Kg	1	10/12/2018 12:28:14 PM E	B54829
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	1	10/12/2018 12:28:14 PM E	B54829

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 4 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810740

Date Reported: 10/15/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: Stock Pile

Project: Galt MN F-1 Line Leak

Collection Date: 10/11/2018 9:40:00 AM

Lab ID: 1810740-005 Matrix: MEOH (SOIL)

Received Date: 10/12/2018 8:07:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	30	mg/Kg	20	10/12/2018 1:29:19 PM 40974
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: Irm
Diesel Range Organics (DRO)	11	9.8	mg/Kg	1	10/12/2018 12:18:33 PM 40973
Motor Oil Range Organics (MRO)	85	49	mg/Kg	1	10/12/2018 12:18:33 PM 40973
Surr: DNOP	112	50.6-138	%Rec	1	10/12/2018 12:18:33 PM 40973
EPA METHOD 8015D: GASOLINE RANGE					Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	10/12/2018 12:50:57 PM R54829
Surr: BFB	97.2	15-316	%Rec	1	10/12/2018 12:50:57 PM R54829
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.018	mg/Kg	1	10/12/2018 12:50:57 PM B54829
Toluene	ND	0.036	mg/Kg	1	10/12/2018 12:50:57 PM B54829
Ethylbenzene	ND	0.036	mg/Kg	1	10/12/2018 12:50:57 PM B54829
Xylenes, Total	ND	0.073	mg/Kg	1	10/12/2018 12:50:57 PM B54829
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	10/12/2018 12:50:57 PM B54829

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 5 of 11 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810740

15-Oct-18

Client:

Harvest

Project:

Galt MN F-1 Line Leak

Sample ID MB-40974

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 40974

Prep Date: 10/12/2018

Analysis Date: 10/12/2018

RunNo: 54842

SeqNo: 1823418

Units: mg/Kg

HighLimit

%RPD

RPDLimit Qual

Analyte Chloride

Result PQL ND 1.5

Sample ID LCS-40974

SampType: Ics

TestCode: EPA Method 300.0: Anions RunNo: 54842

Client ID: LCSS Batch ID: 40974

PQL

Prep Date: 10/12/2018 Analysis Date: 10/12/2018

SeqNo: 1823419

%REC

Units: mg/Kg

%RPD **RPDLimit**

Qual

Result

15.00

SPK value SPK Ref Val %REC LowLimit

110

Chloride

Analyte

15

1.5

SPK value SPK Ref Val

99.0

HighLimit

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
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 6 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810740

15-Oct-18

Client:

Harvest

Project:

Galt MN F-1 Line Leak

Project:	Galt MN	F-1 Line Leal	K							
Sample ID	LCS-40973	SampType	: LCS	Tes	stCode: EP	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	LCSS	Batch ID:	40973	F	RunNo: 54	1831				
Prep Date:	10/12/2018	Analysis Date:	10/12/2018		SeqNo: 18	321180	Units: mg/K	(g		
Analyte		Result P	QL SPK valu	e SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	40	10 50.0		80.5	70	130			
Surr: DNOP		4.6	5.00		91.9	50.6	138			
Sample ID	MB-40973	SampType	: MBLK	Tes	tCode: EP	A Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	PBS	Batch ID:	40973	F	RunNo: 54	831				
Prep Date:	10/12/2018	Analysis Date:	10/12/2018	5	SeqNo: 18	321181	Units: mg/K	g		
Analyte				e SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO) e Organics (MRO)	ND ND	10 50							
Surr: DNOP	e Organics (MRO)	9.2	10.0	0	92.3	50.6	138			
Carrala ID	1010710 0071110				200000000000000000000000000000000000000					
	1810740-005AMS	SampType					8015M/D: Die	esel Rang	e Organics	- 1
	Stock Pile	Batch ID:			RunNo: 54		11.7			
Prep Date:	10/12/2018	Analysis Date:			SeqNo: 18	22093	Units: mg/K	g ·		167
Analyte Diesel Range C)manim (DBO)			e SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	organics (DRO)	4.6	9.2 46.0 4.60		67.9 98.9	53.5 50.6	126 138			
Comple ID	4040740 00548405			T						
Client ID:	1810740-005AMSE	SampType: Batch ID:					8015M/D: Die	esel Range	e Organics	
Prep Date:		Analysis Date:			RunNo: 54		Unito:	_		
	10/12/2010				SeqNo: 18		Units: mg/K			
Analyte Diesel Range C	Ornanics (DRO)		9.8 48.9	e SPK Ref Val 2 11.50	%REC 82.8	LowLimit 53.5	HighLimit 126	%RPD 19.4	RPDLimit 21.7	Qual
Surr: DNOP	riganios (DICO)	5.3	4.89		109	50.6	138	0	0	
Sample ID	LCS-40958	SampType:	1.00	Too	tCodo: ED	A Mathada	004 FM/D. Di-	a a I Danier	0	
Client ID:		Batch ID:			RunNo: 54		8015M/D: Die	esei Kange	e Organics	
Prep Date:	10/11/2018	Analysis Date:			SeqNo: 18:		Units: %Rec			,
									DDD1: "	
Analyte Surr: DNOP		Result PC	QL SPK valu 5.00	e SPK Ref Val	104	50.6	HighLimit 138	%RPD	RPDLimit	Qual
Cample ID	MD 40050									
Sample ID		SampType:					8015M/D: Die	sel Range	Organics	
Client ID: Prep Date:	PBS	Batch ID:			RunNo: 54		Unite: 0/P			
	10/11/2018	Analysis Date:			SeqNo: 18		Units: %Rec			
Analyte		Result PC	QL SPK valu	e SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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

PQL Practical Quanitative Limit

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

Page 7 of 11

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810740

15-Oct-18

Client:

Harvest

Project:

Galt MN F-1 Line Leak

Sample ID MB-40958

SampType: MBLK

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID:

PBS

Batch ID: 40958

RunNo: 54841

Prep Date: 10/11/2018 Analysis Date: 10/12/2018

SeqNo: 1823157

Analyte

Result

SPK value SPK Ref Val %REC LowLimit

Units: %Rec HighLimit

RPDLimit Qual

Surr: DNOP

10

10.00

99.7

50.6

138

%RPD

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Е Value above quantitation range

Analyte detected below quantitation limits

Page 8 of 11

Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810740

15-Oct-18

Client:

Harvest

Project:

Galt MN F-1 Line Leak

Project:	Galt MN	F-1 Line Le	ak								
Sample ID	2.5UG GRO LCS	SampTyp	e: LC	cs	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	je	
Client ID:	LCSS	Batch II	D: R5	54829	F	RunNo: 5	4829				
Prep Date	:	Analysis Dat	e: 10	0/12/2018	5	SeqNo: 1	821217	Units: mg/h	(g		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Ran Surr: BFB	ge Organics (GRO)	24 1100	5.0	25.00 1000	0	96.6	75.9	131			
Sull. BFB		1100		1000		109	15	316			
Sample ID		SampTyp	e: ME	BLK	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	je	
Client ID:		Batch II			F	RunNo: 5	4829				
Prep Date:		Analysis Date	e: 10	0/12/2018	3	SeqNo: 1	822028	Units: mg/k	(g		
Analyte	. (272)		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	ge Organics (GRO)	ND 850	5.0	1000		85.3	15	316			
	1810740-001A MS							8015D: Gaso	line Rang	е	
	North End	Batch II				RunNo: 5					
Prep Date:		Analysis Date	e: 10			SeqNo: 1	823269	Units: mg/K	(g		
Analyte	Oi (ODO)		PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	ge Organics (GRO)	17 740	3.5	17.28 691.1	0	96.2 107	77.8 15	128 316			
0 1 15											
	1810740-001A MS North End							8015D: Gaso	line Rang	е	
Prep Date:		Batch III Analysis Date				RunNo: 5		Lipitor	·		
						SeqNo: 1		Units: mg/K			
Analyte Gasoline Rand	ge Organics (GRO)	Result F	PQL 3.5	SPK value	SPK Ref Val	%REC 93.0	LowLimit 77.8	HighLimit 128	%RPD 3.43	RPDLimit 20	Qual
Surr: BFB	go organico (orto)	720	0.0	691.1	O	105	15	316	0	0	
Sample ID	LCS-40955	SampType	a. I C	e	Tos	Codo: El	DA Mothod	904 ED. Casa	line Dana		
Client ID:		Batch ID				RunNo: 54		8015D: Gaso	line Kang	е	
	10/11/2018	Analysis Date				SeqNo: 18		Units: %Red			
Analyte			PQL		SPK Ref Val	%REC				DDDI iit	01
Surr: BFB		1100	QL	1000	SFR Rei Vai	105	LowLimit 15	HighLimit 316	%RPD	RPDLimit	Qual
Sample ID	MB-40955	SampType	o. MB	21 K	Tost	Codo: El	DA Mathad	904ED: Casa	line Denn		
Client ID:		Batch ID				tunNo: 54		8015D: Gaso	iine Kang	е	
	10/11/2018	Analysis Date				seqNo: 18		Units: %Red			
Analyte										DDDI ::#	Ougl
			PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		930		1000		92.7	15	316			

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

PQL Practical Quanitative Limit

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

Page 9 of 11

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810740

15-Oct-18

Client:

Harvest

C-HANDER 1 I !

Project:	Galt MN	F-1 Line I	Leak								
Sample ID	100NG BTEX LCS	SampT	ype: LC	s	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batch	n ID: B5	4829	F	RunNo: 54829					
Prep Date:		Analysis D	ate: 10	0/12/2018	S	SeqNo: 1	821216	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.0	0.025	1.000	0	102	77.3	128			
Toluene		1.1	0.050	1.000	0	106	79.2	125			
Ethylbenzene		1.0	0.050	1.000	0	104	80.7	127			
Xylenes, Total		3.1	0.10	3.000	0	104	81.6	129			
Surr: 4-Bron	nofluorobenzene	1.0		1.000		105	80	120			
Sample ID	RB	SampT	уре: МЕ	BLK	Test	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batch	ID: B5	4829	R	RunNo: 54	4829				
Prep Date:		Analysis D	ate: 10	0/12/2018	S	SeqNo: 1	822032	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr A Brom	-A	4.0		4 000							
Sull. 4-DIOII	nofluorobenzene	1.0		1.000		101	80	120			
	1810740-002A MS		ype: MS		Test			120 8021B: Volat	iles		
		SampT	ype: MS	3			PA Method		iles		
Sample ID	1810740-002A MS	SampT	ID: B5	4829	R	tCode: EF	PA Method 4829				
Sample ID Client ID:	1810740-002A MS	SampT Batch	ID: B5	4829 0/12/2018	R	Code: EF	PA Method 4829	8021B: Volat		RPDLimit	Qual
Sample ID Client ID: Prep Date:	1810740-002A MS	SampT Batch Analysis D	ID: B5	4829 0/12/2018	R	tCode: Electronic Sequence: 18	PA Method 4829 823412	8021B: Volat	g	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte	1810740-002A MS	SampT Batch Analysis D Result	ate: 10	8 4829 9/12/2018 SPK value	R S SPK Ref Val	tCode: ER tunNo: 54 seqNo: 18 %REC	PA Method 4829 823412 LowLimit	8021B: Volat Units: mg/K HighLimit	g	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene	1810740-002A MS	SampT Batch Analysis D Result 0.72	PQL 0.018	4829 0/12/2018 SPK value 0.7128	SPK Ref Val 0.003721	tCode: EF tunNo: 54 teqNo: 18 %REC 101	PA Method 4829 823412 LowLimit 68.5	8021B: Volat Units: mg/K HighLimit 133	g	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene	1810740-002A MS	SampT Batch Analysis D Result 0.72 0.75	PQL 0.018 0.036	SPK value 0.7128 0.7128	SPK Ref Val 0.003721 0.002523	tCode: EF tunNo: 5 teqNo: 1 %REC 101 104	PA Method 4829 823412 LowLimit 68.5 75	8021B: Volat Units: mg/K HighLimit 133 130	g	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	1810740-002A MS	SampT Batch Analysis D Result 0.72 0.75 0.73	PQL 0.018 0.036 0.036	8 4829 0/12/2018 SPK value 0.7128 0.7128 0.7128	SPK Ref Val 0.003721 0.002523 0	Code: EF cunNo: 54 deqNo: 18 %REC 101 104 103	PA Method 4829 823412 LowLimit 68.5 75 79.4	8021B: Volat Units: mg/K HighLimit 133 130 128	g	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	1810740-002A MS Middle 01	SampT Batch Analysis D Result 0.72 0.75 0.73 2.2 0.76	PQL 0.018 0.036 0.036	8 4829 0/12/2018 SPK value 0.7128 0.7128 0.7128 2.138 0.7128	SPK Ref Val 0.003721 0.002523 0	RegNo: 18 %REC 101 104 103 101 106	PA Method 4829 823412 LowLimit 68.5 75 79.4 77.3 80	8021B: Volat Units: mg/K HighLimit 133 130 128 131	(g %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	1810740-002A MS Middle 01	SampT Batch Analysis D Result 0.72 0.75 0.73 2.2 0.76 SampT	PQL 0.018 0.036 0.036 0.071	SPK value 0.7128 0.7128 0.7128 0.7128 0.7128 0.7128 0.7128	SPK Ref Val 0.003721 0.002523 0 0	RegNo: 18 %REC 101 104 103 101 106	PA Method 4829 823412 LowLimit 68.5 75 79.4 77.3 80	8021B: Volate Units: mg/K HighLimit 133 130 128 131 120	(g %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	1810740-002A MS Middle 01 ofluorobenzene 1810740-002A MSE	SampT Batch Analysis D Result 0.72 0.75 0.73 2.2 0.76 SampT	PQL 0.018 0.036 0.036 0.071 pype: MS	SPK value 0.7128 0.7128 0.7128 0.7128 0.7128 2.138 0.7128	SPK Ref Val 0.003721 0.002523 0 0	**Code: EF** **Code: EF** **Code: EF** **Code: EF** **Code: EF** **Code: EF**	PA Method 4829 823412 LowLimit 68.5 75 79.4 77.3 80 PA Method 4829	8021B: Volate Units: mg/K HighLimit 133 130 128 131 120	g %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte	1810740-002A MS Middle 01 ofluorobenzene 1810740-002A MSE	SampT Batch Analysis D Result 0.72 0.75 0.73 2.2 0.76 D SampT Batch Analysis D Result	PQL 0.018 0.036 0.036 0.071 vype: MS	SPK value 0.7128 0.7128 0.7128 0.7128 0.7128 2.138 0.7128 6D 4829 6/12/2018 SPK value	SPK Ref Val 0.003721 0.002523 0 0	RCode: EF RunNo: 54 REC 101 104 103 101 106 RCode: EF RunNo: 54	PA Method 4829 823412 LowLimit 68.5 75 79.4 77.3 80 PA Method 4829	8021B: Volate Units: mg/K HighLimit 133 130 128 131 120 8021B: Volate	g %RPD	RPDLimit RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date:	1810740-002A MS Middle 01 ofluorobenzene 1810740-002A MSE	SampT Batch Analysis D Result 0.72 0.75 0.73 2.2 0.76 SampT Batch Analysis D	PQL 0.018 0.036 0.036 0.071 ype: MS	SPK value 0.7128 0.7128 0.7128 0.7128 0.7128 2.138 0.7128 6D 4829	SPK Ref Val 0.003721 0.002523 0 0	**REC 101 104 103 101 106 **Code: EF	PA Method 4829 823412 LowLimit 68.5 75 79.4 77.3 80 PA Method 4829 823413	8021B: Volate Units: mg/K HighLimit 133 130 128 131 120 8021B: Volate Units: mg/K	%RPD		
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte	1810740-002A MS Middle 01 ofluorobenzene 1810740-002A MSE	SampT Batch Analysis D Result 0.72 0.75 0.73 2.2 0.76 D SampT Batch Analysis D Result	PQL 0.018 0.036 0.036 0.071 vype: MS	SPK value 0.7128 0.7128 0.7128 0.7128 0.7128 2.138 0.7128 6D 4829 6/12/2018 SPK value	SPK Ref Val 0.003721 0.002523 0 0 Test R S	Code: EF RunNo: 54 REC 101 104 103 101 106 Code: EF RunNo: 54 ReqNo: 18	PA Method 4829 823412 LowLimit 68.5 75 79.4 77.3 80 PA Method 4829 823413 LowLimit	8021B: Volate Units: mg/K HighLimit 133 130 128 131 120 8021B: Volate Units: mg/K HighLimit	%RPD	RPDLimit	
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte Benzene	1810740-002A MS Middle 01 ofluorobenzene 1810740-002A MSE	SampT Batch Analysis D Result 0.72 0.75 0.73 2.2 0.76 D SampT Batch Analysis D Result 0.70	PQL 0.018 0.036 0.071 Type: MS 1D: B5-ate: 10 PQL 0.018	SPK value 0.7128 0.7128 0.7128 0.7128 0.7128 2.138 0.7128 8D 4829 1/12/2018 SPK value 0.7128	SPK Ref Val 0.003721 0.002523 0 0 Test R S SPK Ref Val 0.003721	**REC 101 106 **Code: EF 24NO: 18 24 25 25 25 25 25 25 25 25 25 25 25 25 25	PA Method 4829 823412 LowLimit 68.5 75 79.4 77.3 80 PA Method 4829 323413 LowLimit 68.5	8021B: Volate Units: mg/K HighLimit 133 130 128 131 120 8021B: Volate Units: mg/K HighLimit 133	%RPD illes %RPD 3.28	RPDLimit 20	
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID: Prep Date: Analyte Benzene Toluene	1810740-002A MS Middle 01 ofluorobenzene 1810740-002A MSE	SampT Batch Analysis D Result 0.72 0.75 0.73 2.2 0.76 D SampT Batch Analysis D Result 0.70 0.73	PQL 0.018 0.036 0.071 PQL 0.018 0.036 0.071 PQL 0.018 0.036 0.071 PQL 0.018 0.036 0.036 0.036 0.071	SPK value 0.7128 0.7128 0.7128 0.7128 0.7128 2.138 0.7128 6D 4829 1/12/2018 SPK value 0.7128 0.7128	SPK Ref Val 0.003721 0.002523 0 0 Test R SPK Ref Val 0.003721 0.003721 0.002523	Code: EF 2000 100 100 100 100 100 100 100 100 10	PA Method 4829 823412 LowLimit 68.5 75 79.4 77.3 80 PA Method 4829 323413 LowLimit 68.5 75	8021B: Volate Units: mg/K HighLimit 133 130 128 131 120 8021B: Volate Units: mg/K HighLimit 133 130	%RPD iiles 9 %RPD 3.28 2.62	RPDLimit 20 20	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits

Page 10 of 11

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810740

15-Oct-18

Client:

Harvest

Project:

Galt MN F-1 Line Leak

Sample ID LCS-40955

SampType: LCS

TestCode: EPA Method 8021B: Volatiles

LowLimit

Client ID:

LCSS

Batch ID: 40955

RunNo: 54829

Prep Date: 10/11/2018 Analysis Date: 10/12/2018

Units: %Rec

Analyte

Result PQL SPK value SPK Ref Val

SPK value SPK Ref Val %REC

SeqNo: 1823414

HighLimit

RPDLimit

Surr: 4-Bromofluorobenzene

Client ID:

1.1

1.000

%REC 108

Qual

Sample ID MB-40955

SampType: MBLK Batch ID: 40955

PQL

RunNo: 54829

TestCode: EPA Method 8021B: Volatiles

LowLimit

Prep Date:

10/11/2018

PBS

Analysis Date: 10/12/2018

SeqNo: 1823415

Units: %Rec

%RPD **RPDLimit**

%RPD

Qual

Surr: 4-Bromofluorobenzene

Result

1.000

110

HighLimit

1.1

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

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits

Page 11 of 11

P Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified



tiau Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Na	me: Harvest		Work Order N	umber: 1810740	ĺ	Rcpt	No: 1
Received	By: Victor	ia Zellar	10/12/2018 8:07	':00 AM	Victoria	Gellar	
Complete	d By: Ashley	Gallegos	10/12/2018 8:38	3:18 AM	· A		
Reviewed	By: JAR	sidlizlis	,	labe	led b	by' IO	10/17/19
Chain of	Custody					,	1
1. Is Chai	n of Custody co	mplete?		Yes 🗸	No [Not Present]
2. How wa	as the sample d	elivered?		Courier			
Log In							**
	attempt made	to cool the sampl	es?	Yes 🗸	No [NA [] .
					_	_	
4. Were al	l samples recei	ved at a temperat	ure of >0° C to 6.0°C	Yes 🗸	No L	NA 🗆]
5. Sample	(s) in proper co	ntainer(s)?		Yes 🗹	No 🗆		
0.0						3	
		ne for indicated te DA and ONG) pro	• •	Yes 🗹	No L		
_	servative adde		peny preserved?	Yes 🗆	No 🗹		1
o. was pro	ocivative adde	a to bottles;		165	NO L	, NA L	
9. VOA via	ls have zero he	adspace?		Yes	No 🗆	No VOA Vials	10
10. Were a	ny sample contr	ainers received br	oken?	Yes	No 💆	# of preserved	
11 Does na	perwork match	hottle (shels?		Yes 🗸	No 🗀	bottles skecked	10/12/18
		chain of custody)		res 💌	NO L	S ISIAN S	or >12 unless noted)
12. Are mat	rices correctly in	dentified on Chair	of Custody?	Yes 🔽	No 🗀	Adjusted?	
		were requested?	,	Yes 🗹	No _		
	holding times a	able to be met? or authorization.)		Yes 🗹	No L	Checked by:	<u> </u>
	andling (if a						
		II discrepancies v	ith this order?	Yes	No [NA ₩	1
P	erson Notified:	- Commenter of the Comm	D	ate [NAME AND ADDRESS OF THE PROPERTY OF THE PROPER	Constant	
	y Whom:		Vi	* ***********************************	Phone F	ax In Person	
R	egarding:				ACTIVISMOSTICS NOT NOT A SALES AND A SALES		
C	lient Instruction	s:					
16. Additio	nal remarks:	,	,				
17. Cooler	Information	95					
	er No Temp		Seal Intact Seal No	Seal Date	Signed By		
1 2	3.3 2.7	Good Good	Yes Yes				
C					!		

Chain-of-Custody Record				Turn-Around	Time:	Same day						_							
Client: Harvest mid stream				☐ Standard	Rush	10-12-18												ATV IOT	
Mailing	Address	3:	1 . 12. 24				"			W	ww.ha	allen	viron	men	tal.co	om			
210	1.	1155	Arroyo DR	Graft A	MN F-1	Live Leak		490	01 H	awkins	NE	- All	buqu	erqu	e, N	M 87	109		
			n 87413	Floject#.				Te	1. 50	5-345	The state of the s				755	-410	7		
Phone	#: 5 0	2 - <u>8</u> 2	12-4475									Anal	ysis	Req	uest	t			
OA/OC	Package:	CIJOP.	HONG QW: 11: ON . COM	Project Mana	iger:		£	only)	8				04)	S					
□ Star			☐ Level 4 (Full Validation)	V:	./		(8021)	(Gas	/ N	-	SIMS)		D ₄ ,S	PCB'					
Accred			Lever 4 (1 dir Validation)	Sampler Ma	HONG	111	FMB's	H (G	DRO / MRO		SIS)2,P(
□ NEL	AP	□ Othe	or	Sampler: Ma	Yes W	// · or	Æ	0	-	8.1)	8270		N.	8082					2
	(Type)			Sample Tem	perature / wo	Medical Control	#	3E +	(GRO	141	or 8	als	2	les /		10A	7		1
Date	Time	Matrix	Sample Request ID	for 10/12/16 Container Type and #	Preservative Type		BTEX + MTBE	X + MT	TPH 8015B	TPH (Method 418.1)	PAH's (8310 or	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chload		in District
11/18	9:00	soil	North End	1-402	(001	-001	X		$\overline{\mathbf{x}}$		1 1	14	- A	- 00	- 80	00	V		<
		soil	middle 01	1-402	1	-002	X	_	X	_	+						$\frac{1}{x}$	+	-
	9:15		middle 02	1-402		-003	1	\neg	X	_	+						X		-
9/1/18	9:20			1-402		-004	V	+	X	+	+-						\mathcal{T}		_
11/1/8	9:40	Soil	Stock Pilc	1-402	1	-005	X		X	+	+						X		\vdash
							`				1						7		+
								_	_		_						4		
								\dashv	-		-					-	+	+	
			· · · · · · · · · · · · · · · · · · ·						+	+	+			\dashv	-	\dashv	_	+	-
									1										+
Date: Time: Relinquished by:			Received by:	1 1 1	1-11		arks:												
Date: Time: Relinquished by:			Regeived by:	thefol	A 10/11/18 150	Os													
Philos 1864 Christishor			Aliston III	Mourier 1912	418														
118	100	samples subm	nitted to Hall Environmental may be subco	intracted to other acc	1111 0.01	MILLIA RINI	possib	Silba A-	ni e i t	oont	- d d - t		-1						

District I
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 Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID		
District RP	1013	
Facility ID		
Application ID		

Release Notification

Responsible Party

Responsible Party Harvest Four Corners, LLC						OGRID 37388				
Contact Nam	e Monica S	andoval			Contact Telephone 505-632-4625					
Contact email msandoval@harvestmidstream.com					Incident # (assigned by OCD)					
Contact mail	ing address	1755 Arroyo Dr.,	Bloomfield, NM	87413	}		·			
			Location	of R	Release So	ource				
Latitude 36.9	40625		(N4D 83 in de	cimal de		Longitude -108.276322 grees to 5 decimal places)				
			(NAD 65 in de	cimai ae						
Site Name Ut						neter location / pip	eline leak			
Date Release	Discovered	1/9/2019			API# (if app	licable)	NMOCD			
Unit Letter	Section	Township	Range	ī	Coun	tv	WINDOD			
Ont Letter	35	T32N	R14W	San	Juan		JAN 28 2019			
Surface Owner: State Federal Tribal Private (Name: Ute Mountain Reservation Nature and Volume of Release							DISTRICT			
	Materia	l(s) Released (Select al	l that apply and attach	calcula	tions or specific	justification for the volu	nes provided below)			
Crude Oi		Volume Release	d (bbls)			Volume Recovere				
Normal Produced	Water	Volume Release	d (bbls) 2 gallons	3		Volume Recovered (bbls) 0				
		Is the concentrate produced water	ion of dissolved o >10,000 mg/l?	chlorid	e in the	Yes No				
Condensa	ite	Volume Release	eased (bbls)			Volume Recovere	d (bbls)			
Natural G	as	Volume Release	d (Mcf) 3427 mc	f		Volume Recovere	d (Mcf) 0			
Other (describe) Volume/Weight Released (provide units)	Volume/Weight R	ecovered (provide units)				
was noticed was coming coating of lie	while trend from the en quid mist th ated and wa	ing pressures in t id of a meter run iat displayed on t as blown down. E	he area, and disc on the Ute India he snow surface.	covere n 34 fr Benea	d that pressurom a 1.5 inc oth the surface	ures were going do th orifice from a va ce there was no liqu	the Trunk C Barker Dome pig. It wn instead of building. The leak lve. There appeared to be a light uid visible. The tie in to the meter ee attached pictures and			

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by	At the time of discovery release was expected to exceed 500 mcf, with minimal misting of produced
19.15.29.7(A) NMAC?	water.
⊠ Yes □ No	
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Notice provided by Kiju	in Hong via email 1/9/2019 at 12:36pm. Email sent to Vanessa Fields, Cory Smith and Jim Griswold.
	Initial Response
The responsible	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.
☐ The impacted area ha	as been secured to protect human health and the environment.
	ave been contained via the use of berms or dikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and managed appropriately.
If all the actions describe	d above have <u>not</u> been undertaken, explain why:
If the title tellons describe	a doore have <u>not</u> cook and the same of
Per 19.15.29.8 B. (4) NM	AC the responsible party may commence remediation immediately after discovery of a release. If remediation
has begun, please attach	a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred
within a lined containment	nt area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the info	ormation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and
regulations all operators are	required to report and/or file certain release notifications and perform corrective actions for releases which may endanger ment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have
failed to adequately investig	gate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In
addition, OCD acceptance of	of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
and/or regulations.	
Printed Name: Mon	ica Sandoval Title: Environmental Specialist
Signature:	COSandoval Date: <u>1/23/2019</u>
email: msandoval@l	harvestmidstream.com Telephone: 505-632-4625 (o) 505-947-1852 (C)
	•
OCD Only	
OCD OHLY	y Smith /OLD Date: 1/28/19
Received by:	<u>y</u> <u>Maric</u> / <u>OCI</u> Date:

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

	,					
What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)					
Did this release impact groundwater or surface water?						
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?						
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No					
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No					
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No					
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No					
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No					
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No					
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No					
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No					
Are the lateral extents of the release within a 100-year floodplain?						
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☐ No					
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soi contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.						
Characterization Report Checklist: Each of the following items must be included in the report.						
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs						
☐ Photographs including date and GIS information ☐ Topographic/Aerial maps ☐ Laboratory data including chain of custody	Ť.					

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.					
Printed Name:	Title:				
Signature:	Date:				
email:	Telephone:				
OCD Only					
Received by:	Date:				

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: Each of the following items must be included in the plan.							
 □ Detailed description of proposed remediation technique □ Scaled sitemap with GPS coordinates showing delineation points □ Estimated volume of material to be remediated □ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC □ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) 							
D. C. I. D. J. C. I. C. II. C.							
<u>Deferral Requests Only</u> : Each of the following items must be confirmed as part of any request for deferral of remediation.							
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.							
Extents of contamination must be fully delineated.							
Contamination does not cause an imminent risk to human health, the environment, or groundwater.							
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.							
Printed Name: Title:							
Signature: Date:							
email: Telephone:							
OCD Only							
Received by: Date:							
Approved Approved with Attached Conditions of Approval Denied Deferral Approved							
Signature: Date:							

State of New Mexico Oil Conservation Division

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

Incident ID	
District RP	
Facility ID	
Application ID	

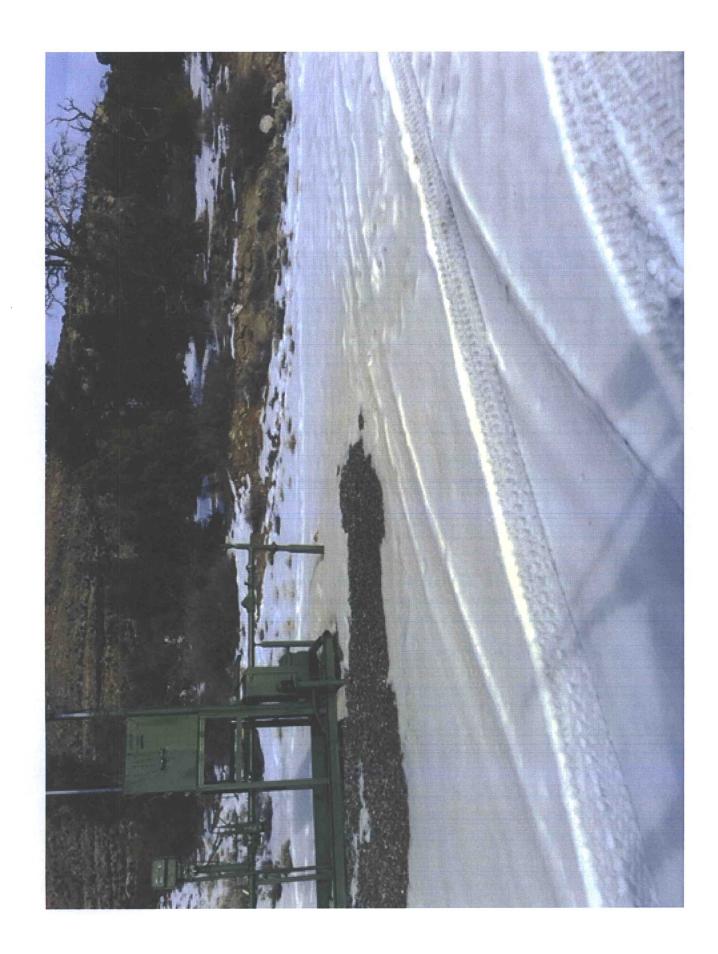
Closure

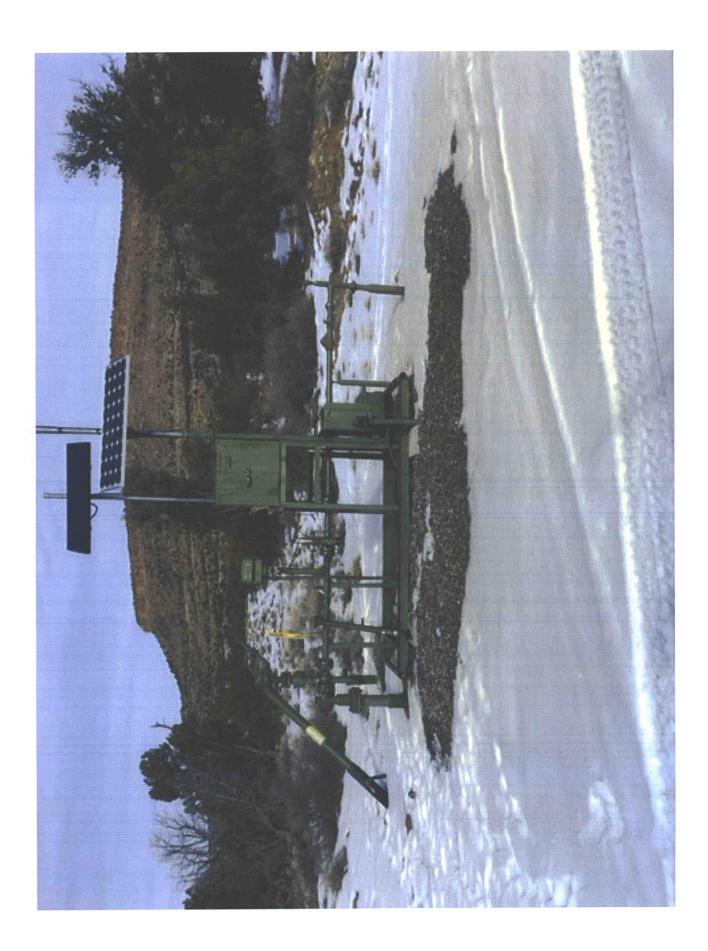
The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

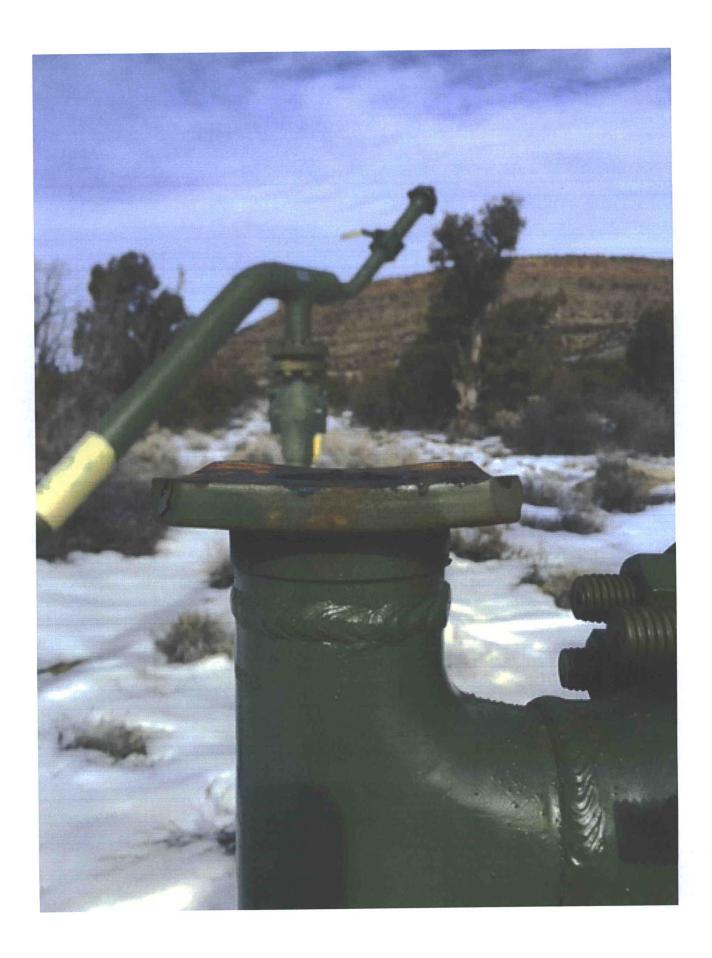
☐ A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODC	District office must be notified 2 days prior to final sampling)
☐ Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and ren human health or the environment. In addition, OCD acceptance of a compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the con accordance with 19.15.29.13 NMAC including notification to the O Printed Name:	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in CD when reclamation and re-vegetation are complete. Title:
Signature:	Date:
email:	Telephone:
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the responsible party remediate contamination that poses a threat to groundwater, surface party of compliance with any other federal, state, or local laws and/o	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by:	Date:
Printed Name:	Title:



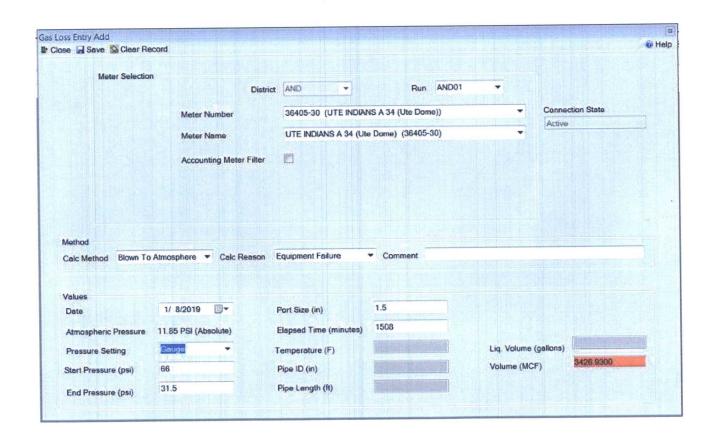












District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	NCS1827631854	
District RP		
Facility ID		
Application ID		

NMOCD

Release Notification

MAR 2 3 2019

Responsible Party

	_	_	_	_		_	_		84	m	
n		G.	T	D	1	P	T	1	1		
U		J	8	n		U		8		9	

							DISTRICT III
Responsible l	Party	Harvest Midstream			OGRID		
Contact Nam	ie	Kijun Hong			Contact Tel	ephone	(505) 632-4475
Contact emai	il	kijun.hong@will	liams.com		Incident # (assigned by OCD)	NCS1827631854
Contact maili	ing address	1755 Arroyo Dr.	, Farmington, NA	M 874	13		
			Location	of R	elease So	ource	
Latitude		36.597103			Longitude _	-10	7.815218
			(NAD 83 in dec	imal de	grees to 5 decim	al places)	
Site Name	Hanks 17				Site Type	Pipeline	
Date Release	Discovered	9/17/2018			API# (if applicable)		
Unit Letter	Section	Township	Range	County			
M	5	27N	9W	San Juan			
Surface Owner	er: State	⊠ Federal □ Tr	ribal Private (A	Vame:)
			Nature and				
				calculat	tions or specific	justification for the v	volumes provided below)
Crude Oi	1	Volume Released (bbls)				Volume Recov	
		ards of		ered (bbls) 104 Yards of impacted			
impacted soil)			soil removed				
			tion of dissolved c	hlorid	e in the	☐ Yes ⊠ No	
		produced water				Volume Recov	rarad (hhls)
Condensate Volume Released (bbls)				volume Recov	ered (DDIS)		

State of New Mexico Oil Conservation Division

Incident ID	NCS1827631854
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by 19.15.29.7(A) NMAC?	Exceeded 50 cubic yards of contaminated soil removed per OCD guidance.
⊠ Yes □ No	
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, Cory Smith, Vanes	sa Field, and Jim Griswold were notified by email on 9/18/2018 by Kijun Hong.
	Initial Response
The responsible	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.
	as been secured to protect human health and the environment.
-	ave been contained via the use of berms or dikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and managed appropriately.
If all the actions describe	d above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NM	IAC the responsible party may commence remediation immediately after discovery of a release. If remediation
has begun, please attach	a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred nt area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the info	ormation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and required to report and/or file certain release notifications and perform corrective actions for releases which may endanger
public health or the environ	ment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have
failed to adequately investig	gate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
and/or regulations.	
Printed Name: Kij	un Hong Title: Environmental Specialist
Signature:	Date: <u>10/2/2018</u>
email: <u>kijun.hong@</u>	williams.com Telephone: 505-436-8457
OCD Only	
Received by:	Date:

State of New Mexico Oil Conservation Division

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

Incident ID	NCS1827631854	
District RP		
Facility ID		
Application ID		

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
□ Description of remediation activities
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Kijun Hong Title:Environmental Specialist
Received by: Date: 3123 1209
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date: Title: Title:

Executive Summary

Harvest Four Corners, LLC (Harvest) presents the following report summarizing remediation and soil sampling activities at the Hanks 17 pipeline release (Site) located in Unit M, Section 5, Township 27 North, Range 9 West, in San Juan County, New Mexico (Figure 1). On September 17, 2018, Harvest discovered a release due to corrosion on the pipeline. Harvest estimated 26.6 thousand cubic feet (MCF) of natural gas and an estimated 75 barrels (bbl) of produced water were released. Approximately 104 yards of soil were impacted. The release occurred on federal land. Harvest notified the New Mexico Oil Conservation Division (NMOCD) within 24 hours via email and submitted a Release Notification and Corrective Action Form C-141 on October 2, 2018. The NMOCD assigned the release incident number NCS1827631854.

Due to impacted soil observed in a forth-order tributary to Hoot Owl Canyon, which is a significant watercourse, the following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 100 mg/kg total petroleum hydrocarbons (TPH); and 600 mg/kg chloride.

Harvest repaired the pipeline and excavated 104 yards of impacted soil. On September 21, 2018, Harvest collected four 5-point composite soil samples from the sidewalls and floor of the excavation. Additionally, a 6-point composite soil sample was collected from the drainage. A representative from the NMOCD was present during the soil sampling. A map of the sample locations is included as Attachment 1.

The soil samples were shipped following chain-of-custody procedures to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH- motor oil range organics (MRO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.0.

Laboratory analytical results for the initial soil sampling event indicated that the West End Floor and East End Floor soil samples contained concentrations of chloride exceeding the NMOCD Table 1 closure criteria of 600 mg/kg. The East End Sidewall and West End Sidewall soil samples contained concentrations of TPH and total BTEX that exceeded the NMOCD Table 1 closure criteria. Benzene, total BTEX, TPH, and chloride concentrations in the drainage soil sample were complaint with NMOCD Table 1 closure criteria.

The excavation was extended laterally and horizontally, and subsequent soil samples were collected on September 28, 2018 and February 20, 2019. Laboratory analytical results indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria in all subsequent soil samples collected. A table with laboratory analytical data is included as Attachment 2 and copies of the laboratory analytical results are included as Attachment 3.

All final soil samples collected from the sidewalls and floor of the excavation as well as the drainage soil sample were compliant with the NMOCD Table 1 closure criteria. Harvest requests no further action for incident number NCS1827631854. A photographic log of the Site is included as Attachment 4.

ATTACHMENT 1
FIELD MAP

Remediation Excavation and Sampling Form

Site Name _ H	GNKS 1	7			
Excavation Din	nensions (feet)				
137'	Length	20'	Width	3	Depth
	gram and Samp e features, excavation	le Locations n extents, visual obse	ervations, sample lo	ocations, north a	arrow, etc.)
Sample Information		Pra-was e	K X X X X X X X X X X X X X X X X X X X	X	X X X Sidewall X Floor
•	-		•		•
OCD Witness Sa Agency(s) Repr	ampling(Yes)or esentative(s)	No corey sm	n;th		
		Туре	Loca	tion	

		Туре	Location	
Sample ID	Sample Date	(Composite, Grab)	(Floor, Sidewall)	Comments
westend	9-21-18	composite	Floor	
East ENd	9-21-18	composite	Floor	
	9-21-18	Composita	sidewalls	
East ENd	9-21-18	composite	sidewalls	
Drainage	9-21-18	confosite	F1005	Surface
		·	•	
			0.000	

ATTACHMENT 2
SOIL ANALYTICAL RESULTS

Hanks 17 Pipeline Release Laboratory Analytical Results

			NMOCD		Date	
Sample Location	ample Analyte Unit Closu ocation Criter	Closure Criteria	9/21/2018	9/28/2018	2/20/2019	
	Chloride	mg/kg	600	720	NA	<60
West End	TPH	mg/kg	100	81	NA	NA
Floor	BTEX	mg/kg	50	0.43	NA	NA
	Benzene	mg/kg	10	<0.094	NA	NA
	Chloride	mg/kg	600	690	NA	<60
East End	TPH	mg/kg	100	24	NA	NA
Floor	BTEX	mg/kg	50	<0.39	NA	NA
	Benzene	mg/kg	10	<0.098	NA	NA
	Chloride		600	410	NA	NA
West End	TPH	mg/kg	100	1,960	<49	NA
Sidewall	BTEX	mg/kg	50	146.92	0.129	NA
	Benzene	mg/kg	10	0.62	<0.014	NA
	Chloride	mg/kg	600	520	NA	NA
East End	TPH	mg/kg	100	2,240	9.5	NA
Sidewall	BTEX	mg/kg	50	93.1	<0.088	NA
	Benzene	mg/kg	10	0.3	<0.022	NA
	Chloride	mg/kg	600	<30	NA	NA
Drainage	TPH	mg/kg	100	11	NA	NA
Drainage	BTEX	mg/kg	50	<0.38	NA	NA
	Benzene	mg/kg	10	<0.095	NA	NA

Notes:

BTEX: benzene, toluene, ethylbenzene, total xylenes

mg/kg: milligram per kilogram

NA: not analyzed

NMOCD: New Mexico Oil Conservation Division

TPH: total petroleum hydrocarbons

< not detected above laboratory reporting limits

ATTACHMENT 3

LABORATORY ANALYTICAL REPORTS



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

September 26, 2018

Kijun Hong Williams Field Services 1755 Arroyo Dr., Bloomfield, NM 87413 TEL: (505) 632-4442

FAX

RE: Hanks 17 Line Leak

OrderNo.: 1809D14

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/22/2018 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1809D14

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/26/2018

CLIENT: Williams Field Services Client Sample ID: West End Floor

Project: Hanks 17 Line Leak Collection Date: 9/21/2018 10:00:00 AM

Lab ID: 1809D14-001 Matrix: MEOH (SOIL) Received Date: 9/22/2018 10:15:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	720	30	mg/Kg	20	9/24/2018 12:00:54 PM	40536
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: Irm
Diesel Range Organics (DRO)	81	9.9	mg/Kg	1	9/24/2018 10:53:05 AM	40532
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/24/2018 10:53:05 AM	40532
Surr: DNOP	110	50.6-138	%Rec	1	9/24/2018 10:53:05 AM	40532
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	9/24/2018 9:47:35 AM	G54357
Surr: BFB	116	15-316	%Rec	5	9/24/2018 9:47:35 AM	G54357
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.094	mg/Kg	5	9/24/2018 9:47:35 AM	B54357
Toluene	ND	0.19	mg/Kg	5	9/24/2018 9:47:35 AM	B54357
Ethylbenzene	ND	0.19	mg/Kg	5	9/24/2018 9:47:35 AM	B54357
Xylenes, Total	0.43	0.38	mg/Kg	5	9/24/2018 9:47:35 AM	B54357
Surr: 4-Bromofluorobenzene	98.9	80-120	%Rec	5	9/24/2018 9:47:35 AM	B54357

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 1 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1809D14

Date Reported: 9/26/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Client Sample ID: East End Floor

Hanks 17 Line Leak **Project:**

Collection Date: 9/21/2018 10:10:00 AM

Lab ID: 1809D14-002 Matrix: MEOH (SOIL) Received Date: 9/22/2018 10:15:00 AM

Result	PQL	Qual Units	DF	Date Analyzed	Batch
				Analyst	smb
690	30	mg/Kg	20	9/24/2018 12:13:18 PM	40536
ANICS				Analyst	: Irm
24	9.7	mg/Kg	1	9/24/2018 11:15:05 AM	40532
ND	48	mg/Kg	1	9/24/2018 11:15:05 AM	40532
107	50.6-138	%Rec	1	9/24/2018 11:15:05 AM	40532
				Analyst	NSB
ND	20	mg/Kg	5	9/24/2018 10:10:55 AM	G54357
115	15-316	%Rec	5	9/24/2018 10:10:55 AM	G54357
				Analyst	NSB
ND	0.098	mg/Kg	5	9/24/2018 10:10:55 AM	B54357
ND	0.20	mg/Kg	5	9/24/2018 10:10:55 AM	B54357
ND	0.20	mg/Kg	5	9/24/2018 10:10:55 AM	B54357
ND	0.39	mg/Kg	5	9/24/2018 10:10:55 AM	B54357
94.7	80-120	%Rec	5	9/24/2018 10:10:55 AM	B54357
	690 ANICS 24 ND 107 ND 115 ND ND ND ND ND	690 30 ANICS 24 9.7 ND 48 107 50.6-138 ND 20 115 15-316 ND 0.098 ND 0.20 ND 0.20 ND 0.39	690 30 mg/Kg ANICS 24 9.7 mg/Kg ND 48 mg/Kg 107 50.6-138 %Rec ND 20 mg/Kg 115 15-316 %Rec ND 0.098 mg/Kg ND 0.20 mg/Kg ND 0.20 mg/Kg ND 0.20 mg/Kg ND 0.39 mg/Kg	690 30 mg/Kg 20 ANICS 24 9.7 mg/Kg 1 ND 48 mg/Kg 1 107 50.6-138 %Rec 1 ND 20 mg/Kg 5 115 15-316 %Rec 5 ND 0.098 mg/Kg 5 ND 0.20 mg/Kg 5 ND 0.20 mg/Kg 5 ND 0.20 mg/Kg 5 ND 0.39 mg/Kg 5	Analyst 690 30 mg/Kg 20 9/24/2018 12:13:18 PM ANICS 24 9.7 mg/Kg 1 9/24/2018 11:15:05 AM ND 48 mg/Kg 1 9/24/2018 11:15:05 AM 107 50.6-138 %Rec 1 9/24/2018 11:15:05 AM Analyst ND 20 mg/Kg 5 9/24/2018 10:10:55 AM 115 15-316 %Rec 5 9/24/2018 10:10:55 AM Analyst ND 0.098 mg/Kg 5 9/24/2018 10:10:55 AM ND 0.20 mg/Kg 5 9/24/2018 10:10:55 AM ND 0.39 mg/Kg 5 9/24/2018 10:10:55 AM

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

- 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 9 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1809D14

Date Reported: 9/26/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Client Sample ID: West End Sidewall

Project: Hanks 17 Line Leak

Collection Date: 9/21/2018 10:15:00 AM

Lab ID: 1809D14-003

Matrix: MEOH (SOIL) Received Date: 9/22/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	smb
Chloride	410	30		mg/Kg	20	9/24/2018 12:25:43 PM	40536
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	Irm
Diesel Range Organics (DRO)	160	9.9		mg/Kg	1	9/24/2018 11:37:10 AM	40532
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/24/2018 11:37:10 AM	40532
Surr: DNOP	111	50.6-138		%Rec	1	9/24/2018 11:37:10 AM	40532
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	1800	220		mg/Kg	50	9/24/2018 5:34:05 PM	G54357
Surr: BFB	227	15-316		%Rec	50	9/24/2018 5:34:05 PM	G54357
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	0.62	0.11		mg/Kg	5	9/24/2018 10:57:28 AM	B54357
Toluene	28	2.2		mg/Kg	50	9/24/2018 5:34:05 PM	B54357
Ethylbenzene	8.3	0.22		mg/Kg	5	9/24/2018 10:57:28 AM	B54357
Xylenes, Total	110	4.3		mg/Kg	50	9/24/2018 5:34:05 PM	B54357
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	50	9/24/2018 5:34:05 PM	B54357

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

- * 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
- PQL Practical Quanitative Limit
 - 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 Page 3 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1809D14

Date Reported: 9/26/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Client Sample ID: East End Sidewalls

Project: Hanks 17 Line Leak

Collection Date: 9/21/2018 10:20:00 AM

Lab ID: 1809D14-004

Matrix: MEOH (SOIL) Received Date: 9/22/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	smb
Chloride	520	30		mg/Kg	20	9/24/2018 12:38:08 PM	40536
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	840	9.9		mg/Kg	1	9/24/2018 11:59:16 AM	40532
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/24/2018 11:59:16 AM	40532
Surr: DNOP	110	50.6-138		%Rec	1	9/24/2018 11:59:16 AM	40532
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	1400	21		mg/Kg	5	9/24/2018 11:44:00 AM	G54357
Surr: BFB	1220	15-316	S	%Rec	5	9/24/2018 11:44:00 AM	G54357
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	0.30	0.11		mg/Kg	5	9/24/2018 11:44:00 AM	B54357
Toluene	19	0.21		mg/Kg	5	9/24/2018 11:44:00 AM	B54357
Ethylbenzene	6.8	0.21		mg/Kg	5	9/24/2018 11:44:00 AM	B54357
Xylenes, Total	67	4.2		mg/Kg	50	9/24/2018 5:57:23 PM	B54357
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	50	9/24/2018 5:57:23 PM	B54357

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 4 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1809D14

Date Reported: 9/26/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Project: Hanks 17 Line Leak

Lab ID: 1809D14-005

Client Sample ID: Drainage

Collection Date: 9/21/2018 10:30:00 AM

Matrix: MEOH (SOIL) Received Date: 9/22/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	smb
Chloride	ND	30		mg/Kg	20	9/24/2018 12:50:33 PM	40536
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst	Irm
Diesel Range Organics (DRO)	11	9.9		mg/Kg	1	9/24/2018 12:21:21 PM	40532
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/24/2018 12:21:21 PM	40532
Surr: DNOP	108	50.6-138		%Rec	1	9/24/2018 12:21:21 PM	40532
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	9/24/2018 10:34:12 AM	G54357
Surr: BFB	95.9	15-316		%Rec	5	9/24/2018 10:34:12 AM	G54357
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.095		mg/Kg	5	9/24/2018 10:34:12 AM	B54357
Toluene	ND	0.19		mg/Kg	5	9/24/2018 10:34:12 AM	B54357
Ethylbenzene	ND	0.19		mg/Kg	5	9/24/2018 10:34:12 AM	B54357
Xylenes, Total	ND	0.38		mg/Kg	5	9/24/2018 10:34:12 AM	B54357
Surr: 4-Bromofluorobenzene	94.0	80-120		%Rec	5	9/24/2018 10:34:12 AM	B54357

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

- 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
- PQL Practical Quanitative Limit
 - 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 Page 5 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809D14 26-Sep-18

Client:

Williams Field Services

Project:

Hanks 17 Line Leak

Sample ID MB-40536

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: **PBS**

Batch ID: 40536

RunNo: 54365

Prep Date: 9/24/2018

Analysis Date: 9/24/2018

SeqNo: 1801166

Units: mg/Kg

%RPD

RPDLimit Qual

Analyte Chloride

Client ID:

Result PQL ND 1.5

Sample ID LCS-40536

SampType: Ics Batch ID: 40536

PQL

RunNo: 54365

TestCode: EPA Method 300.0: Anions

HighLimit

Prep Date:

9/24/2018

LCSS

Analysis Date: 9/24/2018

SeqNo: 1801167

Units: mg/Kg

Qual

Analyte

Result

1.5 15.00

LowLimit

%RPD **RPDLimit**

93.8

90

HighLimit

Chloride

14

SPK value SPK Ref Val %REC

SPK value SPK Ref Val %REC LowLimit

110

Qualifiers:

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

Page 6 of 9

Hall Environmental Analysis Laboratory, Inc.

PQL

9.6

Result

58

5.1

WO#:

%RPD

HighLimit

126

138

RPDLimit

Qual

1809D14

26-Sep-18

Client:

Williams Field Services

Project:

Analyte

Surr: DNOP

Diesel Range Organics (DRO)

Hanks 17 Line Leak

Sample ID LCS-40532	SampType:	LCS	TestC	ode: EPA Method	8015M/D: Diesel Rang	ge Organics	
Client ID: LCSS	Batch ID:	40532	Ru	nNo: 54355			
Prep Date: 9/24/2018	Analysis Date:	9/24/2018	Se	qNo: 1799469	Units: mg/Kg		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC LowLimit	HighLimit %RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10 50.00	0	106 70	130		
Surr: DNOP	4.9	5.000		97.7 50.6	138		
Sample ID MB-40532	SampType:	MBLK	TestC	ode: EPA Method	8015M/D: Diesel Ran	ge Organics	
				ınNo: 54355			
Client ID: PBS	Batch ID:	40532	Ru	MINO. 54355			
Prep Date: 9/24/2018	Analysis Date:	9/24/2018	Se	qNo: 1799470	Units: mg/Kg		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC LowLimit	HighLimit %RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10					
Motor Oil Range Organics (MRO)	ND	50					
Surr: DNOP	10	10.00		99.6 50.6	138		
Sample ID 1809D14-005AMS	SampType:	MS	TestC	Code: EPA Method	8015M/D: Diesel Ran	ge Organics	
Client ID: Drainage	Batch ID:	40532	Ru	ınNo: 54355			
Prep Date: 9/24/2018	Analysis Date:	9/24/2018	Se	eqNo: 1799740	Units: mg/Kg		

Sample ID 1809D14-00	5AMSD SampT	ype: MS	SD.	Test	TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: Drainage	Batch ID: 40532 RunNo: 54355									
Prep Date: 9/24/2018	Analysis D	alysis Date: 9/24/2018 SeqNo: 1799962 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	9.7	48.40	10.88	102	53.5	126	4.27	21.7	
Surr: DNOP	5.3		4.840		110	50.6	138	0	0	

10.88

%REC

97.4

107

LowLimit

53.5

50.6

SPK value SPK Ref Val

48.22

4.822

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

PQL Practical Quanitative Limit

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

Page 7 of 9

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

SampType: LCS

WO#:

1809D14 26-Sep-18

Client: Williams Field Services
Project: Hanks 17 Line Leak

Sample ID 2.5UG GRO LCS

TestCode: EPA Method 8015D: Gasoline Range SampType: MBLK Sample ID RB RunNo: 54357 Batch ID: **G54357** Client ID: **PBS** Analysis Date: 9/24/2018 SeqNo: 1801710 Units: mg/Kg Prep Date: HighLimit %RPD **RPDLimit** Qual SPK value SPK Ref Val %REC LowLimit PQL Analyte Result Gasoline Range Organics (GRO) ND 5.0 316 1000 98.7 15 Surr: BFB 990

RunNo: 54357 Client ID: LCSS Batch ID: G54357 SeqNo: 1801711 Units: mg/Kg Analysis Date: 9/24/2018 Prep Date: %RPD **RPDLimit** Qual HighLimit Result SPK value SPK Ref Val %REC LowLimit PQL Analyte 103 75.9 131 5.0 25.00 0 Gasoline Range Organics (GRO) 26 15 316 115 Surr: BFB 1100 1000

TestCode: EPA Method 8015D: Gasoline Range

TestCode: EPA Method 8015D: Gasoline Range Sample ID 1809D14-001AMS SampType: MS RunNo: 54357 Client ID: West End Floor Batch ID: G54357 SeqNo: 1801712 Analysis Date: 9/24/2018 Units: mg/Kg Prep Date: HighLimit %RPD **RPDLimit** Qual SPK value SPK Ref Val %REC LowLimit PQL Analyte Result 9.480 128 116 77.8 Gasoline Range Organics (GRO) 120 19 94.05 316 4800 3762 129 15 Surr: BFB

TestCode: EPA Method 8015D: Gasoline Range Sample ID 1809D14-001AMSD SampType: MSD Batch ID: G54357 RunNo: 54357 West End Floor Client ID: Units: mg/Kg SeqNo: 1801713 Prep Date: Analysis Date: 9/24/2018 HighLimit %RPD **RPDLimit** Qual SPK value SPK Ref Val %REC LowLimit Result PQL Analyte 6.25 20 94.05 9.480 125 77.8 128 130 19 Gasoline Range Organics (GRO) 316 0 0 3762 127 15 4800 Surr: BFB

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

PQL Practical Quanitative Limit

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

Page 8 of 9

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809D14

26-Sep-18

Client:

Williams Field Services

Project:

Hanks 17 Line Leak

	0 7			Tool	Cada: FI	DA Method	9024B: Volat	ilos		
Sample ID RB	Sampl	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch	Batch ID: B54357			RunNo: 54357					
Prep Date:	Analysis D	oate: 9/	24/2018	S	SeqNo: 1	801725	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		96.2	80	120			

Sample ID 100NG E	TEX LCS	SampType: LCS TestCode: EPA Method 8021B: Volatiles									
Client ID: LCSS		Batch II	D: B5	4357	F	RunNo: 54	4357				
Prep Date:	P	Analysis Dat	24/2018	S	SeqNo: 1801726 Units: mg/Kg						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.95	0.025	1.000	0	94.9	77.3	128			
Toluene		0.98	0.050	1.000	0	97.8	79.2	125			
Ethylbenzene		0.95	0.050	1.000	0	95.0	80.7	127			
Xylenes, Total		2.9	0.10	3.000	0	95.8	81.6	129			
Surr: 4-Bromofluoroben	zene	0.99		1.000		99.0	80	120			

Sample ID 1809D14-002AMS	SampT	ype: MS	3	Test	tCode: El	PA Method	8021B: Volat	iles		
Client ID: East End Floor	Batch	n ID: B5	4357	R	RunNo: 5	4357				
Prep Date:	Analysis D	oate: 9/	24/2018	S	SeqNo: 1	801727	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.0	0.098	3.907	0	77.1	68.5	133			
Toluene	3.2	0.20	3.907	0.09883	79.4	75	130			
Ethylbenzene	3.1	0.20	3.907	0.07305	78.3	79.4	128			S
Xylenes, Total	9.5	0.39	11.72	0.2289	78.8	77.3	131			
Surr: 4-Bromofluorobenzene	3.7		3.907		95.2	80	120			

Sample ID 1809D14-002AMS	SampT	ype: MS	SD	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: East End Floor	Batch	ID: B5	4357	F	RunNo: 5	4357				
Prep Date:	Analysis D	ate: 9/	24/2018	5	SeqNo: 1	801728	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.0	0.098	3.907	0	75.9	68.5	133	1.62	20	
Toluene	3.1	0.20	3.907	0.09883	77.5	75	130	2.40	20	
Ethylbenzene	3.1	0.20	3.907	0.07305	76.2	79.4	128	2.58	20	S
Xylenes, Total	9.3	0.39	11.72	0.2289	77.8	77.3	131	1.25	20	
Surr: 4-Bromofluorobenzene	3.7		3.907		94.9	80	120	0	0	

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

PQL Practical Quanitative Limit

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

Page 9 of 9

P Sample pH Not In Range

RL Reporting Detection Limit



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107

Sample Log-In Check List

LABORATORY	Website: www	w.hallenvironmente	al.con		
Client Name: WILLIAMS FIELD SERVI	Work Order Numl	ber: 1809D14		RcptNo:	1
Received By: Erin Melendrez	9/22/2018 10:15:00	AM	L'UL		
Completed By: Ashley Gallegos	9/22/2018 10:26:20	AM	A		*
Reviewed By: JAB 09/24/1	s i	abeled	b4!_A	T 09/24/1	۶
Chain of Custody					
1. Is Chain of Custody complete?		Yes 🗸	No 🗔	Not Present	
2. How was the sample delivered?		Courier			
Log In					
3. Was an attempt made to cool the samples?		Yes 🗹	No 🗆	NA 🗆	
4. Were all samples received at a temperature	of >0° C to 6.0°C	Yes 🗹	No 🗆	NA 🗆	
5. Sample(s) in proper container(s)?		Yes 🗹	No 🗌		
Sufficient sample volume for indicated test(s)	3)?	Yes 🗸	No 🗌		
7. Are samples (except VOA and ONG) proper		Yes 🗹	No 🗆		
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗆	
9. VOA vials have zero headspace?		Yes	No 🗀	No VOA Vials 🗹	
10. Were any sample containers received broke	en?	Yes	No 🗹	# of preserved	
			_	bottles checked	
11. Does paperwork match bottle labels?		Yes 🗸	No 🗔	for pH:	>12 unless noted)
(Note discrepancies on chain of custody)	: O	Yes 🗸	No 🗆	Adjusted?	12 dilless flotted)
12. Are matrices correctly identified on Chain of	Custody?		No 🗆	,	
13. Is it clear what analyses were requested?		Yes ✓ Yes ✓	No 🗆	Checked by:	
14. Were all holding times able to be met? (If no, notify customer for authorization.)		TES 🖭	140		
Special Handling (if applicable)					
15. Was client notified of all discrepancies with	this order?	Yes 🗆	No 🗌	NA 🗹	
Person Notified:	Date		***************************************		
By Whom:	: Via:	eMail	Phone Fax	☐ In Person	
Regarding:					
Client Instructions:				CORPUS DE LA CONTRACTION DE CONTRACT	
16. Additional remarks:					
	Seal Intact Seal No	Seal Date	Signed By		

C	hain-	of-Cu	stody Record	Turn-Around		sameda 4				Н	A		FN	W	TR	O	NN	1FI	NT	ΔI	
Client:	WF	5		□ Standard	r Rush_	9-24-18								-, 0					ТО		,
		•		Project Name	:							.halle									
Mailing	Address:	1753	- ARROYO DR	HONR	5 17 15	Ne Leak		490)1 Ha	awkii	ns N	E	Albu	que	rque	, NV	1 87°	109			
			um 87413	Project #:	<i>0 1 p.</i>	Nc Leak				5-34					-	345-4					
			-4475				I.	The second				Ar	nalys	sis F	Requ	uest				983	
email or	r Fax#: <i>k</i>	TIUN-1	Hong @williams-con	Project Mana	ger:		_	nly)	30					04)							
	Package:						3021	38 01	M			(2)) ₄ ,S(CB's						
□ Stan	dard		☐ Level 4 (Full Validation)	KIJUN	HON9	1	TMB's (8021)	+ TPH (Gas only)	8			SIMS)		2,PC	22 P						
Accredi				Sampler:Ma	rgan Ki	11:00	. ₹	直	0/0	£.	504.1)	8270		2	808						or N)
□ NEL		□ Othe	er	On Ice:	erature 5	11 1NO 11 11 11 11 11 11 11 11 11 11 11 11 11	+	+ Ш	SR	418	207	or 8	SIS	စ္ချိ	les /		10A				Yor
□ EDD	(Type) _ I			Sample Leu			#	/TB	3B (pou	(Method	310	Met	[]	ticic	OA	mi-	13			es (
D .		Nation	Cample Beguest ID	Container	Preservative	HEAL No.	++	1+>	801	(Me	(Me	s (8)	A 8	S (F	Pes	B	(Se	Monda			lqqn
Date	Time	Matrix	Sample Request ID	Type and #	Туре	"LSD9D14"	BTEX	BTEX + MTBE	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB	PAH's (8310	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	7			Air Bubbles (Y
ald		17	1 - 2 5 1 1 -		0 1	-001	X		<u></u>	-	Щ	-	11	4	8	ω	8	X		+	
			West ENd Floor	1-402	1001		X	:	$\frac{1}{\sqrt{2}}$		\dashv	+	+		_		\dashv		+	+	\forall
<u> 421/18</u> 9/4/18	1810	Soil	East End Floor	1-402		-002	1/1		À		-		\dashv	\dashv	-		\dashv	\Rightarrow	+	+	+
9/2//8	1015	soil	West ENd Sidewall	1-402		-003	X		X				\dashv	\dashv	-			A	-	+	+
121/18	1020	Soil	East End sidewall	1-402		7004	X		X		_	_	\dashv	-	-	-		X	+	+	+
9/21/18	1036	Soil	Dra-Nage	1-402	1	7005	X		X					_	\dashv		\dashv	X	_	_	\perp
													_	_				\rightarrow	\perp	+	1
													_					\vdash	\perp	+	\perp
																	\square			\perp	\perp
													_							\perp	
-																			\perp	\perp	
																			\perp	_	
Date:	Time:	Relinquish		Received by:	, 0	Date Time	Re	mark	s:												
9/2//18	1307	mo	y Killen	Must	uhlali	teu 9/2/19 1307	7														
Date:	Time:	279	hed by:	Received by:	- cour	rier Date Time															
F 2/18	1749	Show	allellerita	MA	>	4/22/18	1									-4			ol ====		
	If necessary	, samples sul	bmitted to Hall Environmental may be sub-	contracted to other	accredited laborator	ies. This serves as notice of th	is poss	ibility.	Any s	ub-con	ıtracte	d data	will be	clear	iy nota	ated or	ı tne a	naryuc	ai repon		



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

October 02, 2018

Kijun Hong Williams Field Services 1755 Arroyo Dr., Bloomfield, NM 87413

TEL: (505) 632-4442

FAX

RE: Hanks 17

OrderNo.: 1809H93

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/29/2018 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1809H93

Date Reported: 10/2/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services Client Sample ID: East End Sidewalls

Project: Hanks 17 Collection Date: 9/28/2018 9:30:00 AM

Lab ID: 1809H93-001 Matrix: MEOH (SOIL) Received Date: 9/29/2018 10:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	TOM
Diesel Range Organics (DRO)	9.5	9.1		mg/Kg	1	10/1/2018 12:33:09 PM	40692
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/1/2018 12:33:09 PM	40692
Surr: DNOP	102	50.6-138		%Rec	1	10/1/2018 12:33:09 PM	40692
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	10/1/2018 10:09:56 AM	G54538
Surr: BFB	98.4	15-316		%Rec	1	10/1/2018 10:09:56 AM	G54538
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.022		mg/Kg	1	10/1/2018 10:09:56 AM	B54538
Toluene	ND	0.044		mg/Kg	1	10/1/2018 10:09:56 AM	B54538
Ethylbenzene	ND	0.044		mg/Kg	1	10/1/2018 10:09:56 AM	B54538
Xylenes, Total	ND	0.088		mg/Kg	1	10/1/2018 10:09:56 AM	B54538
Surr: 4-Bromofluorobenzene	91.2	80-120		%Rec	1	10/1/2018 10:09:56 AM	B54538

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 1 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1809H93

Date Reported: 10/2/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Client Sample ID: West End Sidewalls

Collection Date: 9/28/2018 9:20:00 AM Project: Hanks 17

Received Date: 9/29/2018 10:05:00 AM Matrix: MEOH (SOIL) Lab ID: 1809H93-002

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/1/2018 12:57:44 PM	40692
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/1/2018 12:57:44 PM	40692
Surr: DNOP	99.5	50.6-138	%Rec	1	10/1/2018 12:57:44 PM	40692
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	2.9	mg/Kg	1	10/1/2018 10:33:35 AM	G54538
Surr: BFB	105	15-316	%Rec	1	10/1/2018 10:33:35 AM	G54538
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.014	mg/Kg	1	10/1/2018 10:33:35 AM	B54538
Toluene	0.045	0.029	mg/Kg	1	10/1/2018 10:33:35 AM	B54538
Ethylbenzene	ND	0.029	mg/Kg	1	10/1/2018 10:33:35 AM	B54538
Xylenes, Total	0.084	0.058	mg/Kg	1	10/1/2018 10:33:35 AM	B54538
Surr: 4-Bromofluorobenzene	93.1	80-120	%Rec	1	10/1/2018 10:33:35 AM	B54538

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
 - S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits Page 2 of 6
- Sample pH Not In Range P
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809H93

02-Oct-18

Client:

Williams Field Services

Project:

Hanks 17

Sample ID LCS-40692	SampT	ype: LC	S	Test	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batch	ID: 40 6	692	R	RunNo: 5	4542				
Prep Date: 10/1/2018	Analysis D	ate: 10	/1/2018	S	SeqNo: 1	808036	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.4	70	130			
Surr: DNOP	4.8		5.000		95.6	50.6	138			
Sample ID MB-40692	SampT	уре: МЕ	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: PBS	Batch	n ID: 40	692	F	RunNo: 5	4542				
Prep Date: 10/1/2018	Analysis D	ate: 10	0/1/2018	5	SeqNo: 1	808037	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Piep Date. 10/1/2016	Allalysis De	atc. It	77 172010					J		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		96.8	50.6	138			
Sample ID 1809H93-001AMS	SampT ⁻	vpe: MS		Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	

Sample ID	1809H93-001AMS	SampT	ype: MS	3	Test	Code: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	East End Sidewall	s Batch	ID: 40	692	R	RunNo: 5	4542				
Prep Date:	10/1/2018	Analysis D	ate: 10	0/1/2018	S	SeqNo: 1	808663	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	51	9.2	46.04	9.540	90.0	53.5	126			
Surr: DNOP	,	4.6		4.604		100	50.6	138			

Sample ID 1809H93-001AM	SD SampT	ype: MS	SD	Test	Code: EF	PA Method	8015M/D: Die	esel Range	Organics	
Client ID: East End Sidew	alls Batch	ID: 40	692	R	tunNo: 54	4542				
Prep Date: 10/1/2018	Analysis D	ate: 10	0/1/2018	S	eqNo: 18	808664	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	9.2	45.91	9.540	105	53.5	126	12.6	21.7	
Surr: DNOP	4.8		4.591		104	50.6	138	0	0	

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

PQL Practical Quanitative Limit

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

Page 3 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809H93

02-Oct-18

Client:

Williams Field Services

Project:	Hanks 17										
Sample ID	RB	SampType	e: MB	BLK	Test	Code: El	PA Method	8015D: Gasol	ine Range	е	
Client ID:	PBS	Batch ID	: G5	4538	R	unNo: 5	4538				
Prep Date:		Analysis Date	: 10)/1/2018	S	eqNo: 1	808598	Units: mg/Kg	3		
Analyte		Result P	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	ge Organics (GRO)	ND	5.0								
Surr: BFB		970		1000		97.3	15	316			
Sample ID	2.5UG GRO LCS	SampType	e: LC	s	Test	Code: El	PA Method	8015D: Gasol	ine Rang	е	
Client ID:	LCSS	Batch ID): G 5	4538	R	tunNo: 5	4538				
Prep Date:		Analysis Date	e: 10	0/1/2018	S	SeqNo: 1	808599	Units: mg/Kg	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	ge Organics (GRO)	26	5.0	25.00	0	104	75.9	131			
Surr: BFB		1100		1000		110	15	316			
Sample ID	1809H93-001AMS	SampType	e: MS	3	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	е	
Client ID:	East End Sidewal	Is Batch ID): G 5	54538	F	RunNo: 5	4538				
Prep Date:		Analysis Date	e: 10	0/1/2018	8	SeqNo: 1	808600	Units: mg/K	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Ran	ge Organics (GRO)	22	4.4	21.93	0	102	77.8	128			
Surr: BFB		960		877.2		109	15	316			
Sample ID	1809H93-001AMS	D SampType	e: M \$	SD	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	е	
Client ID:	East End Sidewal	Is Batch ID): G 5	54538	F	RunNo: 5	4538				
Prep Date:	:	Analysis Date	e: 10	0/1/2018	5	SeqNo: 1	808601	Units: mg/K	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Ran	ge Organics (GRO)	22	4.4	21.93	0	99.5	77.8	128	2.89	20 0	
Surr: BFB		930		877.2		106	15	316	0		
Sample ID	MB-40666	SampTyp	e: MI	BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch II	D: 40	666	F	RunNo: 5	54538				10
Prep Date	9/28/2018	Analysis Date	e: 1	0/1/2018	5	SeqNo: 1	1808626	Units: %Red	:		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		920		1000		92.3	15	316			
Sample ID	LCS-40666	SampTyp	e: LC	cs	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	je	
Client ID:		Batch II			F	RunNo:	54538				
	9/28/2018	Analysis Date	e: 1	0/1/2018	;	SeqNo: '	1808627	Units: %Red	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
						100		216			

Qualifiers:

Surr: BFB

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

1100

1000

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

15

316

Value above quantitation range E

108

Analyte detected below quantitation limits J

Page 4 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

0.029

0.029

0.058

0.61

0.55

1.8

0.55

0.5770

0.5770

1.731

0.5770

WO#:

1809H93

02-Oct-18

Client:

Williams Field Services

Project:

Hanks 17

Sample ID	RB	SampT	ype: ME	BLK	Test	Code: El	PA Method	8021B: Volat	iles		
Client ID:	PBS	Batch	ID: B5	4538	R	tunNo: 54	4538				
Prep Date:		Analysis D	ate: 10	/1/2018	S	eqNo: 1	808634	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	nofluorobenzene	0.96		1.000		95.5	80	120			
Sample ID	100NG BTEX LCS	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batch	ID: B5	4538	F	RunNo: 5	4538				
Prep Date:		Analysis D	ate: 10	0/1/2018	5	SeqNo: 1	808635	Units: mg/K	(g		
r rep bate.									-	DDDI ::	01
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.91	0.025	1.000	0	91.4	77.3	128			
Toluene		0.94	0.050	1.000	0	94.3	79.2	125			
Ethylbenzene		0.92	0.050	1.000	0	92.1	80.7	127			
Xylenes, Total		2.8	0.10	3.000	0	93.2	81.6	129			
Surr: 4-Bron	nofluorobenzene	0.95		1.000		95.2	80	120			
Sample ID	1809H93-002AMS	SampT	ype: MS	3	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID:	West End Sidewa	IIs Batch	ID: B5	4538	F	RunNo: 5	4538				
Prep Date:		Analysis D	ate: 10	0/1/2018	\$	SeqNo: 1	808636	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.54	0.014	0.5770	0.008251	92.1	68.5	133			

Sample ID 1809H93-002AM	SD SampT	ype: MS	D	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: West End Sidew	: West End Sidewalls Batch ID: B54538 RunNo: 54538									
Prep Date:	Analysis D	ate: 10	/1/2018	8	SeqNo: 1	808637	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.53	0.014	0.5770	0.008251	89.7	68.5	133	2.57	20	
Toluene	0.59	0.029	0.5770	0.04512	95.2	75	130	2.40	20	
Ethylbenzene	0.54	0.029	0.5770	0.01269	92.1	79.4	128	1.77	20	
Xylenes, Total	1.7	0.058	1.731	0.08401	94.3	77.3	131	2.72	20	
Surr: 4-Bromofluorobenzene	0.54		0.5770		93.5	80	120	0	0	

0.04512

0.01269

0.08401

Qualifiers:

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

* 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

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

75

79.4

77.3

80

97.7

93.7

97.0

95.0

130

128

131

120

E Value above quantitation range

J Analyte detected below quantitation limits

Page 5 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1809H93

02-Oct-18

Client:

Williams Field Services

Project:

Hanks 17

Sample ID MB-40666

PBS

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

Batch ID: 40666

RunNo: 54538

Client ID:

PQL

Prep Date: 9/28/2018 Analysis Date: 10/1/2018

SeqNo: 1808662

Units: %Rec

HighLimit

RPDLimit

Qual

Analyte Surr: 4-Bromofluorobenzene Result 0.90 SPK value SPK Ref Val %REC 1.000

SPK value SPK Ref Val %REC

LowLimit 90.5

80

120

%RPD

Sample ID LCS-40666

LCSS

SampType: LCS Batch ID: 40666 TestCode: EPA Method 8021B: Volatiles RunNo: 54538

Prep Date:

9/28/2018

Analysis Date: 10/1/2018

SeqNo: 1808665

Units: %Rec HighLimit

Qual

Analyte

Client ID:

Result

93.1

80

LowLimit

120

%RPD **RPDLimit**

Surr: 4-Bromofluorobenzene

0.93

1.000

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

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

Value above quantitation range E

Analyte detected below quantitation limits J

Page 6 of 6

Sample pH Not In Range P

Reporting Detection Limit RL Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.con

Sample Log-In Check List

Client Name:	WILLIAMS FIELD SERVI	Work Order Number:	1809	9H93			RcptNo:	1
	v				i [1	1		
Received By:	Erin Melendrez	9/29/2018 10:05:00 AM	1	V	700	-	<u> </u>	
Completed By:	Ashley Gallegos	9/29/2018 10:23:09 AM	Æ.	5	La.			
Reviewed By:	IO 19	Tolles	La	beled	be	f.	A- 10/01	117
Chain of Cust	tody							
1. Is Chain of Cu	ustody complete?		Yes	✓	No [Not Present	
2. How was the	sample delivered?		Cour	rier				
Log In			Yes		No [7	NA 🗆	
o. vvas an attem	pt made to cool the samples?		Yes		NO L	_	NA L	
4. Were all samp	oles received at a temperature	of >0° C to 6.0°C	Yes	✓	No [NA 🗆	
5. Sample(s) in p	proper container(s)?		Yes	V	No [
6. Sufficient sam	ple volume for indicated test(s	s)?	Yes	\checkmark	No [
7. Are samples (e	except VOA and ONG) proper	ly preserved?	Yes	✓	No [
8. Was preservat	tive added to bottles?		Yes		No 🛂		NA 🗆	
9. VOA vials have	e zero headspace?		Yes		No [No VOA Vials 🗹	
10. Were any san	nple containers received broke	en?	Yes		No 🖢	/	# of preserved	771
The same of the sa	ork match bottle labels? ancies on chain of custody)		Yes	V	No [bottles checked for pH:	>12 unless noted)
	correctly identified on Chain of	Custody?	Yes	V	No [Adjusted?	
	t analyses were requested?	,	Yes	✓	No [J		
14. Were all holding	ng times able to be met? ustomer for authorization.)		Yes	V	No [Checked by:	
Special Handl	ing (if applicable)							46
	otified of all discrepancles with	this order?	Yes		No [NA 🗹	
By Who	greatest and a second a second and a second	Date Via:	_ eM	lail Phon	ie 🔲 I	Fax	In Person	
Regardi	Service Committee of the Committee of th		noise a constanti				CONTRACTOR	
	nstructions:		·····					
16. Additional re	marks:							
17. Cooler Infor Cooler No		The state of the s	Seal E	Date Sig	ined B	ÿt		

· C	hain-	of-Cu	stody Record	Turn-Around		5ancda4				Н	A	LL	E	VV	IR	0	NM	1EN	IT#	AL	
Client:	NES			□ Standard	☑ Rush_	10-1-18												RA			
	• 1 0			Project Name	:					١	www	ı.hall	envi	ronn	nenta	al.co	m				
Mailing	Address:	175	-ARROYO DR	HUNKS	Hanks 17			49	01 H	awki	ns N	E -	Alb	uque	erque	e, NN	M 871	109			
Bloom	mFie	Id N	M 87413	Project #: Tel. 505-345-3975																	
Phone 7	4:505	-63	2 -				127			1,18		Α		-	Requ	uest					
email o	r Fax#: K	JUN.	HONG DWillis . COM	Project Mana	ger:	*	5	yluc	8					304)	,co						
QA/QC	Package: dard	*	☐ Level 4 (Full Validation)	KINN	HONG rgan Kill		TARB's (8021)	TPH (Gas only)	RO/N			SIMS)		,PO4,	2 PCB's						
Accredi				Sampler: Mo	rgan Kill	:0N		IPH T	0/D	-	=			8	808					1	î
□ NEL		□ Othe	Pr	On Ide	<u>ک</u> Yes	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	# +	т Ш	GRC	418	504	or 8	SIS	Š	les /		(Semi-VOA)				Y or
	(Type)_			Sample		<u> </u>	N TO	+ MTBE +	5B ((thod	thod	310	Meta	<u>D</u>	sticic	(OA)	-imi				les (
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL News	BTEX + N		TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082	8260B (VOA)	8270 (Se				Air Bubbles (Y or N)
1/8//8	9:30	Soil	ESST END 15	1-402		-001	X		Χ												
128/18	9:30	soil	ESSTENDIS WESTENDIS SIGNEDARS	1-402		7002	X		X								H		-	+-	_
							-	+				v							+	++	
																			\perp		
							_	_					_					\vdash			
							+	-	-	-							\vdash	-	+	++	
	-							+													
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									-				_		-		\vdash		+		
						Date Time			<u> </u>					<u> </u>	<u> </u>	1					_
728/18	128/18 1334 Justa Killion Mustar William 1334																				
Date:	Time:	Relinquis	hed by:	Received by:	MADON	Date Time	05														
11/ P		, samples su	bmitted to Hall Environmental may be sub	contracted to other	accredited laborator	ries. This serves as notice	of this po	ssibility	. Any	sub-co	ntracte	ed data	a will b	e clea	arly no	tated o	on the a	analytica	ıl report		



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

February 25, 2019

Kijun Hong

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX

RE: Hanks 17

OrderNo.: 1902895

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 2 sample(s) on 2/21/2019 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Only

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1902895

Date Reported: 2/25/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: West Bottom Composite 02

Project: Hanks 17

Collection Date: 2/20/2019 9:00:00 AM

Lab ID:

1902895-001

Matrix: SOIL

Received Date: 2/21/2019 8:10:00 AM

Analyses	Result	RL Qu	ial Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: smb
Chloride	ND	60	mg/Kg	20	2/22/2019 6:48:53 PM	43302

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits Page 1 of 3J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1902895

Date Reported: 2/25/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Project:

Hanks 17

Lab ID: 1902895-002

Matrix: SOIL

Client Sample ID: East Bottom Composite

Collection Date: 2/20/2019 9:05:00 AM

Received Date: 2/21/2019 8:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: smb
Chloride	ND	60	mg/Kg	20	2/22/2019 7:01:18 PM	43302

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

- * 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
- PQL Practical Quanitative Limit
- 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 Page 2 of 3
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1902895

25-Feb-19

Client:

Harvest

Project:

Hanks 17

Sample ID: MB-43302

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: PBS

RunNo: 57905

Batch ID: 43302

SPK value SPK Ref Val %REC LowLimit

Prep Date: 2/22/2019 Analysis Date: 2/22/2019

SeqNo: 1939513

Units: mg/Kg

%RPD

RPDLimit

Qual

Analyte Chloride

Result

PQL ND

TestCode: EPA Method 300.0: Anions

Client ID:

LCSS

SampType: LCS Batch ID: 43302

RunNo: 57905

HighLimit

2/22/2019 Prep Date:

Sample ID: LCS-43302

Analysis Date: 2/22/2019

Units: mg/Kg

Result Analyte

SPK value SPK Ref Val %REC LowLimit **PQL**

1.5

1.5

SeqNo: 1939514

HighLimit

Qual

15.00

90

110

%RPD

Chloride

14

RPDLimit

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit ND

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

Value above quantitation range E

Analyte detected below quantitation limits J

Page 3 of 3

Sample pH Not In Range P

Reporting Detection Limit RL



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	Harvest	Work Order Nu	ımber: 1902895		RcptNo:	1
Received By:	Leah Baca	2/21/2019 8:10:0	90 AM	Lord Baen		
Completed By:	Leah Baca	2/21/2019 8:24:0	4 AM	Int Baca		
Reviewed By: D		2/21/19	·	Lawys		
Chain of Custo	<u>ody</u>					
1. Is Chain of Cus	stody complete?		Yes 🗹	No 🗌	Not Present	
2. How was the s	ample delivered?		Courier			
Log In 3. Was an attempt	ot made to cool the sa	amples?	Yes 🗹	No 🗌	na 🗆	
4. Were all sample	es received at a temp	perature of >0° C to 6.0°C	Yes 🗹	No 🗆	NA 🗆	
5. Sample(s) in p	roper container(s)?		Yes 🗸	No 🗆		
	ele volume for indicate		Yes 🗹	No 🗌		
7. Are samples (e.	xcept VOA and ONG) properly preserved?	Yes 🗸	No 🗔		
8. Was preservati	ve added to bottles?		Yes	No 🗹	NA L	
9. VOA vials have	zero headspace?		Yes	No 🗌	No VOA Vials 🗹	TO
10. Were any sam	ple containers receiv	ed broken?	Yes 🗀	No 🔽	# of preserved	2/21/19
	k match bottle labels ncies on chain of cus		Yes 🗹	No 🗆		≥12 unless noted)
12. Are matrices co	orrectly identified on (Chain of Custody?	Yes 🗹	No 🗌	Adjusted?	
13. Is it clear what	analyses were reque	sted?	Yes 🗹	No L		
	g times able to be me stomer for authorizat		Yes 🗹	No 🗆	Checked by:	
	ng (if applicable	_		🗖		
15. Was client not	ified of all discrepand	ies with this order?	Yes 🗆	No 🗆	NA 🗹	1
Person	Notified:	. D	ate [
By Who	* *************************************	V	ia: 🗌 eMail 🗌 F	hone 🗌 Fax	In Person	
Regardi	No. 11. 11.			· processor and analysis of the contract of th		
L	structions:					
16. Additional ren	narks:			*		
17. Cooler Inform		Average krigustas apagalas valdas kriganis vid			***	
Cooler No	Temp © Condi	tion Seal Intact Seal N Yes	lo Seal Date	Signed By		

C	hain-	of-Cu	stody Record	Turn-Around	Time:	9				Н	IAI		FI	V		20	NI	1F	NT	AL		
Client:	Harve	st m	id stream	Standard	□ Rush		-		_											DR'		
/	, , , ,			Project Name	:				1			.hall										
Mailing	Address	1755	FARROYO DR	Hank.	5 17			490)1 H	awki		,						109				
			m 874/3	Project #:			Tel. 505-345-3975 Fax 505-345-4107															
			- 4475									A	naly	sis	Req	uest						
email o	r Fax#: K	hong a	harvestmidstream	Project Mana	ger:	i i		(ylu	3					04)								
QA/QC I	Package:		· COM			u u	3021	is oi	W/			(3)		, S(CB's							
□ Stan			□ Level 4 (Full Validation)	KIJUN	HONG		3) 8,8	9	8		146-14W	SIMS)		2,PC	2 P							
Accredi				Sampler: M	organ 15.	:///·o\ =-No	+ TMB's (8021)	핕		- -	=	270		8	808			5			Ê	
□ NEL		□ Othe	r	On Ice:	Yes	□ No.		+	380	418	504	or 8	S	Š	es/		OA				\ or	
	(Type)_			Sample Tem	oerature: /- Ч.		ITBI	TB	B (C	pou	hod	10	/leta	,D,	ticid	OA)	V-in	ردو) se	1
Data	Time	Matrix	Sample Request ID	Container	Preservative	HEAL NO	BTEX + MTBE	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	410			Air Bubbles (Y or N)	
Date	Title	IVIALITA	Sample Request is	Type and #	Туре	1902995	BTE)	BTE	TPH	TPH	EDB	PAH	RCR	Anio	8081	8260	8270	U		10	Air B	
2/20/19	9100	Soil	West Botton	1-402		-601												X	- 12			
2/20/19 2/20/19	9:05	50:1	East Botton	1-402		-007												X		\perp		4
							-															
																			,			
-																						
	-																					
Date: Time: Relinquished by: 2 Received by: Date Time Remarks: 420/19 1023																						
7/ 7 Date:	The state of the s																					
Hola 1754 Charlet Lest Do della 0810																		_				
1-1-	If necessary	, samples sub	omitted to Hall Environmental may be sub	contracted to other a	accredited laborator	ies. This serves as notice of the	nis poss	sibility.	Any s	sub-cor	ntracte	ed data	will b	e clea	irly not	tated o	n the	analytic	cal repo	ort.		

ATTACHMENT 4
PHOTOGRAPHIC LOG

Photographic Log



View East of Excavation.

<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 Department

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

Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Volume/Weight Recovered (provide units)

NMOCD **Release Notification** MAR 2 5 2019 **Responsible Party** DISTRICT II Responsible Party Harvest Four Corners, LLC **OGRID** 37388 Contact Name Monica Sandoval Contact Telephone (505) 632-4475 Contact email msandoval@harvestmidstream.com Incident # (assigned by OCD) Contact mailing address 1755 Arroyo Dr., Farmington, NM 87413 **Location of Release Source** Latitude 36.956360 Longitude -107.662966 (NAD 83 in decimal degrees to 5 decimal places) Site Name 32-8#2 Site Type **Compressor Station** Date Release Discovered 1/4/2019 API# (if applicable) Unit Letter Section Range Township County J 27 8W 32N San Juan Surface Owner: State Federal Tribal Private (Name: Nature and Volume of Release Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below) Crude Oil Volume Released (bbls) Volume Recovered (bbls) Produced Water Volume Released (bbls) Volume Recovered (bbls) Is the concentration of dissolved chloride in the Yes No produced water >10,000 mg/l? Condensate Volume Released (bbls) Volume Recovered (bbls) Natural Gas Volume Released (Mcf) 787 Volume Recovered (Mcf) 0 Other (describe)

Volume/Weight Released (provide units)

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

		Application ID						
Cause of Release		*						
Extreme temperatures a	and liquids in the line caused the sensing line to the PRV to f	reeze and fail open.	,					
Operations Technician arrived onsite and found 1.5" rupture disc blowing gas, he was able to shut the inlet off and repair the rupture disc. Failed rupture disc was removed and replaced with a new one. Upon further investigation operations verified that the pressure did not reach the rupture disc set point. Rather moisture must have got under the rain cap and built ice around the rupture disc., or ice from the scrubber vessel reached the rupture disc. The release was attributed to extreme cold freezing conditions, at the time that operations personnel arrived onsite temperature was recorded at -14F.								
Upon discovery, the release was immediately stopped. Additional heat tracing was installed under the existing insulation to prevent future freezes.								
Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider	this a major release?						
19.15.29.7(A) NMAC?	Unauthorized release of gases exceeding 500 MCF							
⊠ Yes □ No								
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by	what means (phone, en	nail, etc)?					
Yes. Via email from Kiji	un Hong. 1/4/2019 10:12pm (attached)		*					
	Initial Response							
The responsible p	party must undertake the following actions immediately unless they could create	a safety hazard that would	result in injury					
☐ The source of the rele	ease has been stopped.							
 ☐ The impacted area has been secured to protect human health and the environment. 								
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.								
All free liquids and recoverable materials have been removed and managed appropriately.								
If all the actions described	ahove have not been undertaken, evaloin vibri							

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release in public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a that addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	otifications and perform corrective actions for releases which may endanger of CDD does not relieve the operator of liability should their operations have areat to groundwater, surface water, human health or the environment. In
Printed Name: Monica Sandoval	Title: Environmental Specialist
Signature:MonicuSandousa	Date:
email: <u>msandoval@harvestmidstream.com</u>	Telephone: <u>505-947-1852</u>
OCD Only	
Received by:	Date:

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)	
Did this release impact groundwater or surface water?	☐ Yes ⊠ No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No	
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No	
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No	
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No	
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No	
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No	
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No	
Are the lateral extents of the release within a 100-year floodplain?		
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ⊠ No	
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.		
Characterization Report Checklist: Each of the following items must be included in the report.		
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data Depth to water determination		
☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release ☐ Boring or excavation logs		
☐ Photographs including date and GIS information ☐ Topographic/Aerial maps ☐ Laboratory data including chain of custody	,	

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release no public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a thraddition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	tifications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have reat to groundwater, surface water, human health or the environment. In
Printed Name: Monica Sandoval Titl	e: Environmental Specialist
Signature: MNCUSANDUSE email:msandoval@harvestmidstream.com	Date:3/21/2019 Telephone:505-632-4625 (o) 505-947-1852 (c)
OCD Only	*
Received by:	Date:

State of New Mexico Oil Conservation Division

Incident ID	
District RP	* + ·
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: Each of the following items must be included in the plan.	
□ Detailed description of proposed remediation technique □ Scaled sitemap with GPS coordinates showing delineation points □ Estimated volume of material to be remediated □ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC □ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)	
Deferred Dequests Only: Each of the following items must be a Company of the following items and the company of the following items must be a company of the following items and the company of the company of the following items and the company of the	
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.	
Extents of contamination must be fully delineated.	
Contamination does not cause an imminent risk to human health, the environment, or groundwater.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: Monica Sandoval Title: Environmental Specialist	
Signature: Date:	
email: msandoval@harvestmidstream.com Telephone: 505-632-4625 (o) 505-947-1852 (c)	
OCD Only	
Received by: Vanossa Fiolols Date:	
Approved	
Signature: Date:	

Form	C-141
Page 7	

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.	
☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC	
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)	
☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)	
☐ Description of remediation activities	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Monica Sandoval Title: Environmental Specialist	
Signature: Date:	
email: <u>msandoval@harvestmidstream.com</u> Telephone: <u>505-947-1852</u>	
OCD Only	
Received by: Cross Fields Date: 312512019	
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: Name: Name: Special Title: Environmental Specials	
- State of the sta	

From:

Monica Sandoval

To:

"Fields, Vanessa, EMNRD"; "Smith, Cory, EMNRD"; "Griswold, Jim, EMNRD"; "I1thomas@blm.gov"

Cc:

Kijun Hong; Tristen Ruybalid

Subject:

15 Day Notification - Harvest - 32-8#2 CDP - PRV Release 1/4/2019

Date:

Monday, January 21, 2019 3:32:00 PM

Attachments:

Immediate Notification - Harvest 32-8 #2 PRV Release.msq C-141 32-8#2 PRV Release - 1-21-2019 INITIAL-FINAL.pdf

My apologies – I actual found where we did provide initial notification of the release. I have attached the initial email notification to this email.

Please let me know if you need anything else.

Thank-you, Monica

From: Monica Sandoval

Sent: Monday, January 21, 2019 3:25 PM

To: 'Fields, Vanessa, EMNRD' <Vanessa.Fields@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; l1thomas@blm.gov

Cc: Kijun Hong <khong@harvestmidstream.com>; Tristen Ruybalid <truybalid@harvestmidstream.com>

Subject: Immediate & 15 Day Notification - Harvest - 32-8#2 CDP - PRV Release 1/5/2019

Harvest Midstream had a natural gas release of 787 mcf on 1/5/2019 at our 32-8#2 Compressor Station, 36.956360, -107.662966.

There were no liquids associate with the release.

We inadvertently missed the initial notification on this release. Please let this notification serve as the initial, as well as the attached 15 day report.

Please let me know if you need any additional information.

A hard copy will be mailed to your offices.

Thank-you,

Monica Sandoval
EH&S Specialist - Harvest Midstream
msandoval@harvestmidstream.com
505-632-4625 (office)
505-947-1852 (cell)

From:

Kijun Hong

To:

Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (Vanessa, Fields@state.nm.us); Griswold, Jim, EMNRD

Cc:

Monica Sandoval; Jim Stiffler; Travis Jones

Subject:

Immediate Notification - Harvest 32-8 #2 PRV Release

Date:

Friday, January 04, 2019 10:11:37 PM

Attachments:

image001.png image002.png

We had a natural gas release from a PRV at our 32-8 #2 facility (36.956360, -107.662966) earlier today and anticipate that the gas loss volume will exceed 500 MCF. There were no liquids associated with this release.

Please let this serve as immediate notification. Further details to follow.

Thank You, Kijun

Kijun Hong | Harvest Midstream Company | Environmental Specialist | Four Corners Office: 505-632-4475 | Cell: 505-436-8457 | 1755 Arroyo Dr., Bloomfield, NM 87413



Harvest Midstream – 32-8#2 Compressor Station - Gas Loss Release Date: 1/4/2019 Incident Number:

Executive Summary

Extreme temperatures and liquids in the line caused the sensing line to the PRV to freeze and fail open.

Operations Technician arrived onsite and found 1.5" rupture disc blowing gas, he was able to shut the inlet off and repair the rupture disc. Failed rupture disc was removed and replaced with a new one. Upon further investigation operations verified that the pressure did not reach the rupture disc set point. Rather moisture must have got under the rain cap and built ice around the rupture disc., or ice from the scrubber vessel reached the rupture disc. The release was attributed to extreme cold freezing conditions, at the time that operations personnel arrived onsite temperature was recorded at -14F.

Upon discovery, the release was immediately stopped. Additional heat tracing was installed under the existing insulation to prevent future freezes.



Harvest Midstream – 32-8#2 Compressor Station - Gas Loss Release Date: 1/4/2019 Incident Number:

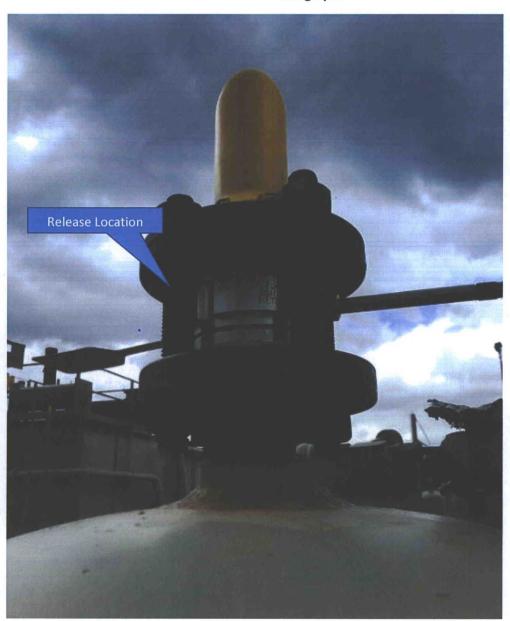
Site Map and Sampling Diagram





Harvest Midstream – 32-8#2 Compressor Station - Gas Loss Release Date: 1/4/2019 Incident Number:

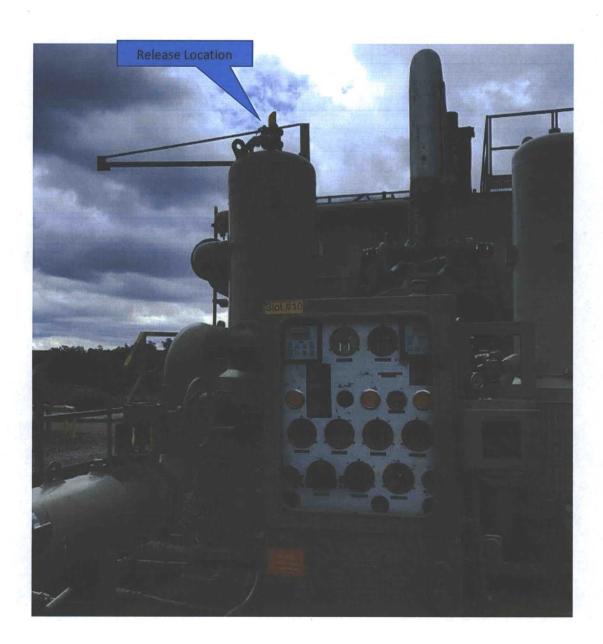
Photographs





Harvest Midstream – 32-8#2 Compressor Station - Gas Loss Release Date: 1/4/2019 Incident Number:

Photographs





Harvest Midstream – 32-8#2 Compressor Station - Gas Loss Release Date: 1/4/2019 Incident Number:

Laboratory Analysis Results

No soil impacts, release was gas loss only.