3R-1011

Release Report/ General Correspondence

Enterprise SJ

Trunk MD 16 Inch 2016

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

		R	eleas	e Notific	atic	on and C	orrective	Acti	on			
					0	PERATO			Initial	Report	\boxtimes	Final Repo
		Enterprise F					homas Long No. 505-599-	2206				
		ve, Farmin		0/401			e: Natural G		eline			
Surface Ov				Mineral C	Jwne					Number:		
Carrace of	MOI. DEM					N OF REL	FASE		Toorial	Trainiou.		
Unit Letter	Section	Township	Range	Feet from	No	rth (South	Feet from	1	West	County		
M	1	29N	11W	the 1185	Lin	e	the 1361	Line		San Jua	ırı	
			La	atitude <u>36.7</u>	5053	4_Longitud	le <u>-107.9473</u>	10				
				NAT	URE	OF RELI						
Type of Rel	ease: Hydro	Static Test \	Water			The second secon	Release Estima Is of potable w		Volume	Recovered	d: Non	е
Source of R	elease: Rup	otured Pipelir	ie			Date and He 6/16/2016 @	our of Occurren 6 6:30 p.m.	ice:	6/16/201	d Hour of 0	p.m.	
Was Immed	iate Notice	Given?	. D No	Not		1	Vhom? Courtes	-				
Required		□ 16;	, Пио	☐ NOT		Katholina D	me June 16, 20 ime			10.01	V DIS	7.3
By Whom?						Date and Ti	me June 16, 20	016@8	3:55 p.m.	CO42. p	- 004	6
Was a Wate	ercourse Re		⊠ Yes	□ No		If YES, Volu	ıme			NO/ 5	8 50	(0
							of potable water proximately 0.5		leased to	the ground	surfa	ce and
testing of th	e Trunk MD	16 Inch pipe	line. Appr		13 ba	rrels of potabl	on June 16, 20 e water was rel 0.5 miles.					
	D witnessin	g sample col					from the source onmental impac					
rules and re which may e relieve the o ground water	gulations al endanger pu operator of li er, surface	l operators a ublic health o iability should yater, human	re require r the envir I their ope health or	d to report and ronment. The erations have f the environme	d/or fil acce ailed ent. I	le certain releate the certain releate to the certain the certain the certain release to th	st of my knowle ase notifications -141 report by to investigate and MOCD acceptar aws and/or regu	s and pe he NMC d remed nce of a	erform cor OCD mark liate conta C-141 re	rective act ed as "Fina mination t	ions fo al Rep hat po	or releases ort" does not se a threat to
Signature:	M	E tou	y				OIL CON	ISER	MOITAN	DIVISI	QN	
Printed Nan	ne: Jon E. F	ields	,			Approved b	y Environmenta	l Specia	alisk)	$\mathcal{Q}_{\mathcal{L}_{\mathcal{L}}}$	1	5
Title: Directo	or, Field En	vironmental					nte:9120120		Expiration	Date:		
E-mail Addr	ess:jefields	@eprod.com				Conditions	1 - 1			Attache	ed 🔲	
Date: A	tional She	ets If Neces		e: (713)381-6	684	MYFIL	167322	47				

* Attach Additional Sheets If Necessary

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.

				Odin		0, 11111 01	000					
		F	Releas	elease Notification and Corrective A								
					0	PERATOR	3] Initial I	Report	\boxtimes	Final Repor
		Enterprise I					nomas Long					
		Ave, Farmin		87401			No. 505-599-					
Facility Na	me: Trunk	MD 16 Inc	h			Facility Typ	e: Natural Ga	s Pipe	eline			
Surface Ov	wner: BLM	l		Mineral Ov	vne	r:BLM			Serial I	Number:		
				LOCAT	ΓΙΟ	N OF REL	EASE					
Unit Letter	Section	Township	Range	Feet from		rth South	Feet from	East	West	County		
М	1	29N	11W	the 126	Lin	е	the 684	Line		San Jua	ın	
							107.01001					
			L	atitude_ <u>36.74</u>	777	<u>0</u> Longitud	e107.94961	<u>6</u>				
				NATU	RE	OF RELI						
		Static Test				120 barrels	delease Estimate of potable wat	er		Recovered		
Source of R	elease: Ruj	ptured Pipeli	ne			6/19/2016 @	our of Occurrence 11:15 a.m.		6/19/201	Hour of [6 @ 11:1	5 a.m.	
Was Immed	iate Notice						Vhom? Courtes	y Notific	cation – Va	anessa Fie	elds, N	IMOCD;
Required		⊠ Ye	s 📙 No	Not		Katherina D	iemer, BLM					
By Whom?	Thomas Lo	ong				Date and Ti	me June 19, 20	16@1	1:35 p.m.			
Was a Wate	ercourse Re	ached?				If YES, Volu	me					
			Yes	☐ No						,		
				y.* Approximate ued a flowing so					ased to the	ground s	urface	and flowed
				tion: At approxin					pture occu	rred durin	g hydr	o-static
testing of the	e Trunk MD	16 Inch pipe	eline. App	roximately 120 b	arre	els of potable	water was relea					
entering an	ephemeral	wash and co	ntinued a	flowing south fo	r ap	proximately 0	.20 miles.					
				Enterprise collec								
			ole collecti	on. Analytical re	esul	ts indicate no	environmental i	mpact.	A third p	arty correc	ctive a	ction report
is included v	with this "Fil	nal." C-141.										
				ve is true and co	-					44		
which may e	endanger pi	ublic health o	or the envi	ronment. The a	cce	ptance of a C-	141 report by th	ne NMC	OCD marke	ed as "Fina	al Rep	ort" does not
				erations have fai								
				the environmen any other federa						ort does r	iot reii	eve tne
operator or r		7	//	arry out or rough	., 00	10000110	OIL CON			DIVISI	ON	
Signature:	m	1. Fre	4						1		7	
Printed Nam	ne: Jon E. F	ields				Approved by	/ Environmental	Specia	alist:		<u></u>	
Title: Directo	or, Field En	vironmental				Approval Da	nte:9/2/20	6	Expiration	Date:		
E-mail Addr	ess:jefjelds	@eprod.com	1			Conditions of	of Approval:					
	,									Attache	ed 🗌	
Date: 16	1/10/2016	4	Phon	e· (713)381 - 668	84	MUEL	9447	421				

State of New Mexico Energy Minerals and Natural Resources

Revised August 8, 2011

Form C-141

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

	R	eleas	e Notifica	atio	n and C	orrective	Actio	on		
				0	PERATO			Initial	Report Fi	nal Repor
Name of Company: Er						homas Long	2206			
Address: 614 Reilly Av Facility Name: Trunk			18/401			No. 505-599 be: Natural G		line		
Surface Owner: State			Minoral	14/20	r: State of N				Number: RW-236	39 141
Surface Owner: State	OI NIVI		Ivilneral O	wne	. State of N			Serial	Number. RVV-236	1011
17			LOCA	TIO	N OF REI	LEASE				For
Unit Letter Section J 36	Township 30N	Range 11W	Feet from the 2280	No Lin	rth South	Feet from the 1520	East	Vest	County San Juan	
3 30	3014	1144	116 2200	LIII	<u> </u>	116 1320	Line		Jan Juan	
A.V.		1	_atitude_36.7	7674	3 Longitud	le107.9389	3			No. of Control of Control
			NATI	IRF	OF RELI	FASE				
Type of Release: Hydro-S	Static Test \	Vater	10/11		Volume of F	Release Estima		Volume	Recovered: None	
Source of Release: Rupti	ıred Pinelin	ρ				of potable wa		Date and	d Hour of Discovery	
					6/22/2016	1:25 p.m.		6/22/201	16 @ 1:25 p.m.	1993
Was Immediate Notice G	iven? ⊠ Yes	☐ No	Not		If YES, To V	Vhom? Vaness	sa Fields,	NMOCD)	
Required	Z 100		L Not							15.1.
By Whom? Thomas Lon	g				Date and Ti	me June 22, 2	016@2	:25 p.m.		
Was a Watercourse Read		⊠ Yes			If YES, Volu	ime				. 0
	L.	∆ les								
If a Watercourse was Imp							vas relea	sed to the	e ground surface an	d flowed
west entering an epheme Describe Cause of Proble							16, a rup	ture occu	urred during hydro-s	tatic
testing of the Trunk MD 1	6 Inch pipe	line. Appr	oximately 100	barre	els of potable	water was rele				
entering an ephemeral wa	asti and cor	illinued a	nowing west to	or app	oroximately 0.	ou miles.				
Describe Area Affected a										
with NMOCD witnessing included with this "Final."		ection. Ar	nalytical results	indic	cate no enviro	onmental impac	t. A third	party co	rrective action repor	tis
										a proper and a
I hereby certify that the in										
rules and regulations all of which may endanger pub										
relieve the operator of lial	bility should	their ope	rations have fa	ailed	to adequately	investigate an	d remedi	ate conta	amination that pose	a threat to
ground water, surface wa operator of responsibility								C-141 rep	port does not relieve	the d
	1	//						10/FA	DIVISION	- (4/3)
Signature:	· ru	7						1 X		
Printed Name: Jon E. Fie	lds				Approved by	y Environmenta	al Specia	list:	and :	>
Title: Director, Field Envir	onmental				Approval Da	ate: 121112	Ollo E	Expiration	Date:	. [1
						10.1.1	-141			
E-mail Address:jefields@	eprod.com				Conditions	of Approval:			Attached	
Date: 10/10/2011		Disc	(740)004 00	0.4	N. 17	7051100	_			163
Date: /0/10/20/1 Attach Additional Sheet	s If Neces		e: (713)381-66	004	MALIO	795438	2			9 1

* Attach Additional Sheets If Necessary

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.

						-		-				
		F	Releas	e Notifica	tio	n and C	orrective	Actio	on			
					0	PERATOR	3		Initial	Report	\boxtimes	Final Repo
Name of C							nomas Long					
Address: 6				87401			No. 505-599-					
Facility Nar	me: Trunk	MD 16 Inc	h			Facility Typ	e: Natural G	as Pipe	line			
Surface Ov	vner: BLM			Mineral Ov	vne	r: BLM			Serial	Number:	SN 08	0782
				LOCAT	ΓΙΟ	N OF REL	EASE					
Unit Letter L	Section 30	Township 30N	Range 11W	Feet from the 431	No.	rth South e	Feet from the 1047	East/ Line	Vest	County San Jua	an	
			La	atitude 36.78				99				
Time of Dale	a a a a . I li sedue	Ctatia Tant	Matar	NATU	IKE	OF RELI		4a d	Valuma	Daggyara	d. Non	•
Type of Reis	ease: Hydro	-Static Test	vvaler			THE RESERVE OF THE PROPERTY OF THE PARTY OF	Release Estima s of potable wa		volume	Recovered	J. NOII	5
Source of R	elease: Rup	otured Pipelir	ne			Date and Ho 6/24/2016 @	our of Occurren 3:06 p.m.	ce:		d Hour of I 6 @ 3:06		ery:
Was Immed	iate Notice					If YES, To V	Vhom? Vaness	a Fields,	NMOCD	; Katherin	a Diem	er, BLM
Required		⊠ Yes	s 🗌 No	∐ Not								
By Whom?	Thomas Lo	ng				Date and Ti	me June 24, 20	016@6	:00 p.m.			
Was a Wate	Watercourse Reached?											
southwest e	ntering an e	ephemeral wa	ash to the	y.* Approximate southwest and	con	tinued a flowing	ng south for app	oroximat	ely 0.35 r	niles.		
testing of the	Trunk MD	16 Inch pipe	eline. Appr	ion: At approxin oximately 100 b southwest and	arre	els of potable	water was relea	ased to t	he ground	d surface a		
	MOCD witn	essing samp		interprise collection. Analytical re								
rules and reg which may e relieve the o ground wate	ereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC as and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases the character public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does rever the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat und water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the erator of responsibility for compliance with any other federal, state, or local laws and/or regulations.							r releases ort" does not se a threat to				
0:		6	1				OIL CON	SERV	ATÌQN	DIVIŞI	ON	
Signature:	Thu	. They			-			1	· X	G		
Printed Nam	e: Jon E. F	ields				Approved by	/ Environmenta	l Special	ist:		_0	~
Title: Directo	or, Field Env	vironmental				Approval Da	te: 1/19/3	OL E	xpiration	Date:		
E-mail Addre	ess:jefields(@eprod.com				Conditions of	of Approval:			Attache	ed \square	
Date:	10/10/2014	<u> </u>	Phone	e: (713)381-668	34	MYF161	7953104	4		Attaorie	· ·	

* Attach Additional Sheets If Necessary

State of New Mexico Energy Minerals and Natural Resources

Form C-141
Revised August 8, 2011
bmit 1 Copy to appropriate District Office

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

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

				Jan	tai	e, INIVIO	303							
		F	itic	on and C	orrectiv	e Ac	tio	n						
					0	PERATO	R			Initial F	Report	\boxtimes	Final Repor	
		Enterprise I					homas Long							
		ve, Farmin		87401			No. 505-59							
Facility Na	me: Trunk	MD 16 Inc	n			Facility Typ	pe: Natural	Gas P	ıpeıı	ne				
Surface Ov	wner: BLM			Mineral O	wne	r: BLM				Serial N	Number:	SN 0	30782	
						N OF REI								
Unit Letter P	Section 18	Township 30N	Range 10W	Feet from the 1017	No Lin	rth/South	Feet from the 1218	Lir	ist W	est	County San Ju	an		
			La	atitude <u>36.80</u>	710	1_Longitud	le <u>107.920</u>	458						
				NATU	JRE	OF RELI	EASE							
Type of Rel	ease: Hydro	-Static Test	Water			The second secon	Release Estir		\	/olume F	Recovere	d: Non	е	
Source of R	elease: Ru	otured Pipeli	ne				our of Occurr				Hour of 6 @ 5:55		ery:	
Was Immed	liate Notice						Vhom? Vane	ssa Fie					ner, BLM	
Required		⊠ Ye	s 🗌 No	☐ Not										
By Whom?	Thomas Lo	ong				Date and Ti	me June 30,	2016 (@ 7:0	0 p.m.				
Was a Wate	Was a Watercourse Reached? ☐ Vac ☑ No.					If YES, Volu	ıme							
	☐ Yes ☒ No													
If a Waterco	ourse was Ir	npacted, Des	scribe Full	y.*										
Describe Ca	ause of Prol	olem and Re	medial Act	tion: At approxi	mate	ely 5:55 p.m.,	on June 30, 2	2016, a	rupti	ire occu	rred durir	ng hydr	o-static	
				oximately 100 lately 500 feet.	barre	els of potable	water was re	leased	to the	e ground	surface	and flo	wed	
Southwest	liong the ng	int-oi-way ioi	аррголіпі	ately 500 leet.										
Describe Ar	ea Affected	and Cleanu	Action: A	approximately 1	00 b	arrels of pota	ble water wa	s releas	sed to	the gro	und surfa	ace and	flowed	
				ately 500 feet. It ble collection. A										
		his "Final" C-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	y	tiour rooutto ii	raioato no on	VIIOIIII	Jinai	impact. 7	v uma po	irty con	COLIVO GOLIOTI	
I hereby cer	tify that the	information	given abov	e is true and co	amo	lete to the bes	st of my know	ledge a	and u	nderstar	nd that pu	ırsuant	to NMOCD	
rules and re	gulations al	I operators a	re require	d to report and/	or fil	e certain rele	ase notification	ons and	perf	orm corr	ective ac	tions fo	or releases	
which may e	endanger pu	ublic health o	r the envir	onment. The a	iled	ptance of a C	-141 report by	y the N	MOC	D marke	d as "Fin	al Rep	ort" does not	
ground water	er, surface v	vater, humar	health or	the environmen	nt. I	n addition, NN	MOCD accept	tance o	fa C					
operator of	responsibilit	y for complia	ance with a	any other federa	al, st	ate, or local la				TION	DI) (10)			
Signature:	/n	. feel					OIL CC	NSE	XVA	<u>HÍON</u>	DIVIS	ION		
D										· /				
Printed Nam	ne: Jon E. F	ields				Approved by	y Environmer	ntal Spe	cialis	t:)			
Title: Directo	or, Field En	vironmental				Approval Da	ate: 1196	MJ	Ex	piration	Date:			
E-mail Addr	ess:jefields	@eprod.com				Conditions	of Approval:				Attach	od 🏻		
Data /	olubri		P.	(740)004 001	0.4	MITTI	70194	0	. 1		Allach	eu 🔟		
Date:	Date: 10/10/241 Phone: (713)381-6684					INAL	1017	, 09	1-1					

<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., Flobbs, NM 87505

State of New Mexico **Energy Minerals and Natural** Resources

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

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

Form C-141 Revised August 8, 2011

	Release Notification and Corrective Action												
					0	PERATOR				Initial I	Report	\boxtimes	Final Repo
		Enterprise F				Contact: TI			96				
		Ave, Farmin		10/401		Facility Typ				ne			
Surface O			,	Mineral O	wne					Serial Number: SN 080782			
				1.004	TIO	N OF BEI	FACE	-					
Unit Letter	Section	Township	Range	Feet from		N OF REL	Feet from	Œ	East We	est	County		
В	19	30N	10W	the 1323	Lin		the 2161		Line		San Jua	ın	
			L	atitude 36.8	0068	3 Longitud	e -107.92	3786					
				NAT	URE	OF RELI	EASE						
Type of Rel	ease: Hydro	o-Static Test	Water			Volume of R				olume l	Recovered	d: Non	е
Source of R	elease: Rup	otured Pipelir	ne			Date and Ho 7/5/2016 @	our of Occu		: Da		d Hour of I		ery:
Was Immed	Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not						Vhom? Van	essa F	ields, NI	MOCD	; Katherin	a Diem	er, BLM
Required													
By Whom?						Date and Ti		2016 @	2) 3:15 p	.m.			
Was a Wate	ercourse Re		If YES, Volume										
				y.* Approximat						d to the	ground s	urface	and flowed
Describe Ca of the Trunk	ause of Prob MD 16 Incl	olem and Rei h pipeline. A	medial Ac	tion: At approxi ely 700 barrels flowed for app	imate of po	ely 9:30 a.m., otable was rel	on July 5, 2 eased to the	016, a	rupture				
Describe Ar with NMOCI included wit	D witnessing	g sample col	o Action: E lection. Ar	nterprise colle nalytical results	cted indic	soil samples f cate no enviro	rom the sound im	urce an pact. A	nd flow p A third pa	oath of t arty cor	the releas rective ac	e on Ju tion rep	uly 5, 2016 port is
rules and re which may e relieve the o ground water	gulations al endanger pu perator of li er, surface v	l operators a ublic health o iability should vater, human	re require or the envi of their ope of health or	ve is true and of to report and comment. The crations have fathe environment, other feder	or fil accep ailed f ent. I	e certain releant ptance of a C- to adequately n addition, NM	ase notificated 141 report investigated 10CD acce	tions ar by the and re ptance	nd perfor NMOCD emediate of a C-1	rm com marke conta	rective act ed as "Fina mination t	ions fo al Repo hat pos	r releases ort" does not se a threat to
Signature:	Jak.	Aud	,				OIL C	ONSE	ERVA	NOIT	DIVISI	ON ON	
Printed Nam	ne: Jon E. F	ields				Approved by	Environme	ental S	pecialist			-	=
Title: Directo	or, Field Env	vironmental				Approval Da		ga-		oiration	Date:		
E-mail Addr	ess:jefields(@eprod.com				Conditions of					Attache	ed 🔲	
Date: /o	/10/2014 tional She	ets If Neces		e: (713)381-66	84	NYFIL	1881	2938	8				

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

100 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

Attached

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.

						0,							
		F	Releas	e Notifica	tio	ion and Corrective Action							
					OF	PERATO	2] Initial F	Report	\boxtimes	Final Repor	
Name of C							homas Long						
Address: 6				87401	_		No. 505-599						
Facility Nar	me: Trunk	MD 16 Inc	h			Facility Typ	oe: Natural C	as Pipe	eline				
Surface Ov	vner: BLM			Mineral Ov	wner	: BLM			Serial N	lumber:	SN 08	30782	
				LOCAT		N OF REI	EASE						
Unit Letter P	Section 18	Township 30N	Range 10W	Feet from the 991	Nort Line	th/South	Feet from the 1263	Line	West	County San Jua	ın		
			La	titude_36.880	0705	0_Longitu	de107.920	<u>570</u>					
				NATU	JRE	OF RELI							
		-Static Test				100 barrels	Release Estim of potable w	ater	Volume F				
Source of R	elease: Rup	otured Pipelii	ne			Date and He 7/8/2016 @	Discov p.m.	ery:					
Was Immed	mmediate Notice Given? ☐ Yes ☐ No ☐ Not						Vhom? Vanes	sa Fields				ner, BLM	
Required		⊠ Ye	s 📙 No	☐ Not									
By Whom?	Thomas Lo	na			-	Date and Ti	me July 8, 20	16 @ 1·5	9 n m				
Was a Wate						If YES, Volu			- р				
			☐ Yes	⊠ No									
If a Waterco	urse was In	npacted, Des	scribe Full	y.*									
testing of the	e Trunk MD	16 Inch pipe	eline. Appr	ion: At approxir oximately 100 b ately 500 feet.									
along the rig	ht-of-way fo MOCD with	or approximates	tely 500 fe	opproximately 1 eet. Enterprise o on. Analytical r	collec	ted soil sam	ples from the s	source ar	nd flow path	n of the re	elease	on July 8,	
rules and re- which may e relieve the o ground water	gulations all endanger pu perator of li er, surface w	l operators a ablic health of ability should vater, humar	re required or the envir d their ope n health or	ve is true and co d to report and/o conment. The a rations have fai the environmer any other federa	or file iccept iled to nt. In	e certain releated tance of a Coo o adequately addition, NN	ase notification -141 report by investigate ar MOCD accepta	ns and pe the NMC nd remed ince of a	erform corre CD marke iate contan C-141 repo	ective act d as "Fina nination t	ions fo al Rep hat pos	or releases ort" does not se a threat to	
Signature:	C/M	14. 4	61			OIL CONSERVATION DIVISION							
Printed Nam	ne: Jon E. F	ields	₹			Approved by Environmental Specialist:							
Title: Directo	or, Field Env	vironmental				Approval Da	11.012		Expiration	Date:			
E-mail Address:jefields@eprod.com						Conditions	of Approval:						

MALICALISTES

Phone: (713)381-6684

Date:

^{10/10/}Zex * Attach Additional Sheets If Necessary

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

Release Notification and Corrective Action

					OPE	RATOR	R] Initial	Report	\boxtimes	Final Repo
Name of C	ompany:	Enterprise F	ield Serv	rices LLC			omas Long					
		ve, Farmin		87401			No. 505-599-					
Facility Na	me: Trunk	MD 16 Inc	h		Fa	acility Typ	e: Natural G	as Pipe	eline			
Surface Ov	vner: BLM			Mineral C	wner: B	LM			Serial	Number:	SN 08	80782
						OF REL	EASE				<i>2</i> 0	
Unit Letter B	Section 19	Township 30N	Range 10W	Feet from the 1193	North S Line	South	Feet from the 2118	East Line	West	County San Jua	ın	
			La	atitude 36.8	01030 L	_ongitud	e <u>-107.9236</u>	60				
				NAT		F RELE						
Type of Rel	ease: Hydro	-Static Test	Water				elease <mark>Estim</mark> a <mark>of potable w</mark> a		1,2	Recovered		
Source of R	elease: Rup	otured Pipelir	ne		7/9	9/2016@9			7/9/2016	d Hour of [6 @ 9:45 a	.m.	
Was Immed	iate Notice		s 🗌 No	☐ Not	If	YES, To W	/hom? Vaness	a Fields	, NMOCD	; Katherina	a Diem	er - BLM
By Whom?	Thomas Lo	ng			Da	ate and Tin	ne July 9, 201	6@11:	:00 p.m.			
Was a Wate	Was a Watercourse Reached? ☐ Yes ☐ No If YES, Volume If YES, Volume If a Watercourse was Impacted, Describe Fully.* Approximately 600 barrels of potable water was released to the ground surface and flowed											
				y.* Approximat ephemeral was						ground s	urface	and flowed
Describe Ca of the Trunk	use of Prob MD 16 Incl	olem and Rei h pipeline. Ap	medial Act	iion: At approx ely 600 barrels wash and flow	imately 9 of potabl	:45 a.m., o le water wa	on July 9, 2016 as released to	, a rupti	ure occurr			
	O witnessing	g sample col		nterprise colle nalytical results								
rules and re which may e relieve the o ground water	gulations al endanger pu perator of li er, surface y	l operators a ublic health o iability should vater, human	re required or the envired their ope to health or	ve is true and of to report and conment. The crations have fathe environment, other feder	l/or file ce acceptan ailed to acent. In ad	ertain relea ace of a C- dequately ddition, NM	ise notification 141 report by t investigate and IOCD acceptal	s and pe the NMC d remed nce of a	erform cor OCD mark liate conta C-141 rep	rective act ed as "Fina mination th	ions fo al Repo hat pos	r releases ort" does not se a threat to
Signature:	In	1. fund	1				OIL CON	ISER\	VATION	DIVISI	<u>ON</u>	
Printed Nam	ne: Jon E. F	ields			Ap	proved by	Environmenta	al Specia	alist.	2		
Title: Directo	or, Field Env	vironmental				proval Dat	11010.	5	Expiration	Date:		
E-mail Addr	ess:jefields	@eprod.com			Co	onditions o	f Approval:	·		Attache	ed 🔲	
Date: /	tional She			e: (713)381-66	584 N	VF162	71136117	—				

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

		R	eleas	e Notifica	atic	on and C	orrective	ACTI	on		
					C	PERATOR	2		Initial	Report 🛛	Final Repo
Name of C	ompany:	Enterprise F	ield Serv	rices LLC		Contact: T	nomas Long				
		Ave, Farmin		87401			No. 505-599-				
Facility Na	me: Trunk	MD 16 Inc	h			Facility Typ	e: Natural G	as Pipe	eline		
Surface Ov	vner: BLM			Mineral C)wne	er: BLM			Serial	Number: SN (080782
						N OF REL					
Unit Letter B	Section 19	Township 30N	Range 10W	Feet from the 1193	Lir	orth South ne	Feet from the 2118	East	vvest	County San Juan	
				Latitude <u>36</u>	.007	6 Longitud	e107.92376				
				NAT	URI	OF RELI	A STATE OF THE PARTY OF THE PAR				
		o-Static Test				600 barrels	delease Estima of potable wa	ter		Recovered: No	
Source of R	elease: Rup	otured Pipelir	ie			7/11/2016 @	our of Occurrent 9:45 a.m.	ice:		d Hour of Disco 6 @ 9:45 a.m.	
Was Immed	iate Notice		ПМ	☐ Not		If YES, To V	Vhom? Vaness	a Fields	, NMOCD	; Katherina Die	mer, BLM
Required		⊠ res	i 🗌 NO	☐ NOI							
By Whom?							me July 11, 20	16 @ 10	0:08 a.m.		
Was a Watercourse Reached? ☐ Yes ☐ No ☐ If YES, Volume ☐ If a Watercourse was Impacted, Describe Fully.* Approximately 600 barrels of potable watercourse was Impacted.											
southwest a	long the rig	ht-of-way ent	ering an e	ephemeral was	sh an	d flowed for a	pproximately 2,	000 fee	t.		
testing of the	e Trunk MD	16 Inch pipe	line. Appr	oximately 600	barr	els of potable		ased to	the ground	red during hyd d surface and fl	
Describe Arwith NMOCI included with	O witnessing	g sample coll	Action: E ection. A	interprise colle analytical resul	ected Its ind	soil samples dicated no env	from the source ironmental imp	and flo act. A th	w path of nird party o	the release on corrective action	July 11, 2016 n report is
rules and re- which may e relieve the o ground water	gulations al endanger pu perator of li er, surface y	l operators a ublic health o iability should vater, human	re require r the envir I their ope health or	d to report and conment. The rations have for the environment	l/or fi acce ailed ent. I	le certain releated to a le control to a le control to a dequately n addition, NN	ase notifications 141 report by to investigate and	s and pe he NMC d remed nce of a	erform con OCD marke liate conta C-141 rep	nd that pursuar rective actions ed as "Final Re mination that p port does not re	for releases eport" does not lose a threat to
Signature:	C/W	1 truck	1				OIL CON	ISE(R)	/ATION	DIVISION	
Printed Nam	ne: Jon E. F	ields				Approved by	/ Environmenta	l Specia	dist.) 3	
Title: Directo	or, Field Env	vironmental				Approval Da	11,0,10		Expiration	Date:	
		@eprod.com				Conditions of	110	_, , ,		Attached [
	tional She	ets If Neces		e: (713)381-66	684	NVFILE	1173875	8			



ENVIRONMENTAL SITE INVESTIGATION REPORT

Property:

Trunk MD 16" Pipeline Hydrostatic Test (Ruptures 1 through 9)

SW ¼ S1 T29N R11W (Rupture 1 and 2) SE ¼ S36 T30N R11W (Rupture 3) NW ¼ S30 T30 N R10W (Rupture 4) SE ¼ S18 T30N R10W (Rupture 5 and 7) NE ¼ S19 T30N R10W (Rupture 6, 8, and 9) San Juan County, New Mexico

> September 12, 2016 Apex Project No. 725040112171

> > Prepared for:

Enterprise Field Services, LLC 614 Reilly Avenue Farmington, NM 87401 Attn: Mr. Thomas Long

Prepared by:

Ranee Deechilly Project Scientist

Kyle Summers, CPG Branch Manager/Senior Geologist

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ENVIRONMENTAL SITE INVESTIGATION REPORT

Trunk MD 16" Pipeline Hydrostatic Test (Ruptures 1 through 9)

SW ¼ S1 T29N R11W (Rupture 1 and 2) SE ¼ S36 T30N R11W (Rupture 3) NW ¼ S30 T30 N R10W (Rupture 4) SE ¼ S18 T30N R10W (Rupture 5 and 7) NE ¼ S19 T30N R10W (Rupture 6, 8, and 9) San Juan County, New Mexico

Apex Project No. 725040112171

1.0 INTRODUCTION

1.1 Site Description & Background

The Trunk MD 16" pipeline hydrostatic test release sites (Ruptures 1 through 9) originated within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way (ROW) in Section 1, Township 29 North, Range 11 West; Section 36, Township 30 North, Range 11 West; and Sections 18, 19, and 30, Township 30 North, Range 10 West, in San Juan County, New Mexico, referred to hereinafter as the "Site(s)".

Between June 17, 2016 and July 7, 2016, Enterprise performed a series of hydrostatic pressure tests on the Trunk MD 16" pipeline, which was separated into four test segments (Segment 1, 2A, 2B, and 3) covering a total span of approximately 10.6 miles, to evaluate the integrity of the pipeline. The hydrostatic pressure tests ultimately resulted in nine (9) ruptures (all in Segments 1 and 2A). The resulting pipeline failures were subsequently repaired and re-tested until the entire pipeline passed the over-pressure and sustained-pressure hydrostatic tests.

Geospatial Positioning Coordinates (GPS)

- Rupture-1: 36.75053N, 107.94731W (Segment 1)
- Rupture-2: 36.747890N, 107.949531W (Segment 1)
- Rupture-3: 36.767490N, 107.939080W (Segment 1)
- Rupture-4:36.78877N, 107.93019W (Segment 2A)
- Rupture-5:36.80710N, 107.92046W (Segment 2A)
- Rupture-6: 36.80065N,107.92373W (Segment 2A)
- Rupture-7: 36.80694 N, 107.92058W (Segment 2A)
- Rupture-8: 36.80097N, 107.92358W (Segment 2A)
- Rupture-9: 36.80079N, 107.92367W (Segment 2A)

Rupture Sites 1, 2, and 4 through 9 are located on land managed by the United States Bureau of Land Management (BLM). Rupture Site 3 is located on land owned by the State of New Mexico and managed by the New Mexico State Land Office. The Sites are surrounded by native-vegetation rangeland periodically interrupted by oil and gas gathering facilities, including the Enterprise MD 16" Trunk natural gas pipeline which traverses the area from approximately north to south

A topographic map depicting the locations of the Sites is included as Figure 1, and a Site Vicinity Map is included as Figure 2 in Appendix A.



1.2 Project Objective

The primary objective of the Environmental Site Investigation (ESI) was to evaluate the potential impact to the environment from the released hydrostatic test water. The soils contacted by the test water (as well as the test water itself) were evaluated to determine if constituents of concern (COCs) affected the on-Site soils at concentrations above the applicable regulatory standards.

2.0 SITE RANKING

In accordance with the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) *Guidelines for Remediation of Leaks, Spills and Releases*, Apex utilized the general site characteristics obtained during the completion of corrective action activities to determine the appropriate "ranking" for the Site.

The ranking criteria are provided in the following table:

Ranking Criteria									
	<50 feet	20							
Depth to Groundwater	50 to 99 feet	10							
	>100 feet	0							
Wellhead Protection Area • <1,000 feet from a water Yes 20									
source, or; <200 feet from private domestic water source.	No	0							
	<200 feet	20							
Distance to Surface Water Body	200 to 1,000 feet	10							
>1,000 feet 0									
Total Ranking Score									

Based on the Apex TITAN, Inc. (Apex) evaluation of the scoring criteria, each of the nine (9) ruptures occurred in, or flowed into, areas that would rank ">19" in the OCD ranking system, due to the distance to surface water body ("blue line" ephemeral washes), and at some releases the projected depth to groundwater due to the duration of the flow path. No water source wells or private domestic water sources are present in the vicinity of the ruptures/releases.

A Site ranking of >19 correlates to the most stringent closure standards for an OCD regulated release, which includes: Benzene at 10 milligrams/kilogram (mg/kg); benzene, ethylbenzene, toluene and total xylenes (BTEX) at 50 mg/kg; and total petroleum hydrocarbon (TPH) combined gasoline range organics (GRO) and diesel range organics (DRO) at 100 mg/kg.

3.0 FIELD ACTIVITIES

3.1 Pipeline Testing and Repair

Between June 17, 2016 and July 7, 2016, Enterprise performed a series of hydrostatic pressure tests on the Trunk MD 16" pipeline, which was separated into four test segments (Segments 1, 2A, 2B, and 3), covering a total distance of approximately 10.6 miles, to evaluate the integrity of the pipeline. The hydrostatic pressure tests ultimately resulted in nine (9) ruptures (all occurring in Segments 1 and 2A). The resulting pipeline failures were subsequently repaired by replacing pipe, and were re-tested until the entire pipeline passed the over-pressure and sustained-pressure hydrostatic tests. During the pipeline repair and ESI activities, Halo Services, Inc.,



provided heavy equipment and labor support, and Ranee Deechilly, Chad D'Aponti, and Kyle Summers, Apex environmental professionals, provided environmental support.

3.2 Environmental Site Investigation

Enterprise's and Apex's soil sampling program combined to include the collection of 38 confirmation flow path samples from the nine (9) rupture Sites for laboratory analysis. Additionally, four (4) water samples were collected from the ruptured pipeline or from standing water at Rupture Sites 1, 2, 6, and 8.

The following table presents each of the Rupture Sites and identifies the corresponding release samples and sample matrices:

Rupture Site	Sample Matrix	Sample I.D
1	Soil	Source and SC-3 –SC-4
2	Soil	SR SC-1 and FP-1 through FP-4
3	Soil	RP-1 through RP-8
4	Soil	WP-1 through WP-6
5	Soil	DP-1 through DP-4
6	Soil	XP-1 through XP-4
7	Soil	HP-1 through HP-3
8&9	Soil	CP-1 through CP-5

Rupture Site	Sample Matrix	Sample I.D	
1	Water	Source	
2	Water	SR WS-1	
6	Water	Rupture #6	
8	Water	Rupture #8	

Enterprise coordinated with the New Mexico OCD to determine appropriate sample collection points and laboratory analytical methods for each Rupture Site. A representative from either the OCD or the BLM was present during each of the soil sampling events.

Domestic supply water from the city of Bloomfield was utilized as the test fluid during each of the hydrostatic tests. Enterprise collected one (1) sample from the pipeline on June 16, 2016, however it was later determined that the sample had been collected from pipeline fluids in front of the pipeline cleaning pig instead of from test water in the pressure test section. As a result, the June 16 sample was not included in this report. Enterprise subsequently collected two (2) samples (Header ES 480 and Header ES 571) of the test water from the water-filled pipeline on June 17, 2016.

Enterprise Field Services, LLC Environmental Site Investigation Report Trunk MD 16" Pipeline Hydrostatic Test (Ruptures 1 through 9) September 12, 2016



Figures 3A through 3E depict the approximate flow paths and sampling locations in relation to pertinent land features (Appendix A). Photographic documentation of the field activities is included in Appendix B.

The flow path soil samples and water samples were collected and placed in laboratory prepared glassware, labeled/sealed using the laboratory supplied labels, and placed on ice in a cooler, which was secured with a custody seal. The samples and completed chain-of-custody form were relinquished to Hall Environmental Analysis Laboratory of Albuquerque, New Mexico for analysis.

3.3 Soil Laboratory Analytical Methods

The flow path soil samples from Rupture Sites 1 through 9 were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA SW-846 Method #8021, total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) using EPA SW-846 Method #8015, and chlorides using EPA Method #300.0. The "Source" sample from Rupture Site 2 was also analyzed for RCRA 8 Metals. The soil samples from Rupture Sites 8 and 9 were also analyzed for anions and cations.

Laboratory results for Site soils are summarized in Tables 1 through 3, included in Appendix C. The executed chain-of-custody form and laboratory data sheets are provided in Appendix D.

3.4 Water Laboratory Analytical Methods

The water sample from Rupture Site 2 was analyzed for volatile organic compounds (VOCs) using EPA Method #8260. The water samples collected from Header ES 480, Header ES 571, and Rupture Sites 1, 6, and 8 samples were analyzed for VOCs using EPA Method #8260, and RCRA 8 Metals. The water sample from Rupture Site 6 was also analyzed for Cations/Anions.

Laboratory results for the water samples are summarized in Tables 4 through 6, included in Appendix C. Due to the extensive list of VOC analytes, Table 4 includes only results for analytes that exceeded the practical quantitation limit (PQL) in one (1) or more samples. The executed chain-of-custody form and laboratory data sheets are provided in Appendix D.

4.0 DATA EVALUATION

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to oil and gas releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the OCD rules, specifically NMAC 19.15.29 *Release Notification*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.1 Soil Samples

Apex compared the constituent concentrations or PQLs associated with the rupture soil samples to the OCD *Remediation Action Levels* (RALs), New Mexico Environmental Department (NMED) baseline Soil Screening Levels (SSLs) (Residential and Industrial), and historic background levels (Arsenic) from available United States Geological Survey (USGS)¹ records.

¹ "Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States (1984)." Hansford T. Shacklette and Josephine G. Boerngen, Professional Paper 1270 USGS.



Benzene, BTEX, TPH, and Chlorides

- The laboratory analyses of the confirmation soil samples collected from Rupture Sites 1 through 9 indicate benzene concentrations below the PQLs, which are below the OCD RAL of 10 milligram per kilogram (mg/kg).
- The laboratory analyses of the confirmation soil samples indicate total BTEX concentrations below the PQLs, which are below the OCD RAL of 50 mg/kg.
- The laboratory analyses of confirmation soil samples collected from Rupture Sites 1 through 9 indicate combined TPH GRO/DRO concentrations ranging from below PQLs to 25 mg/kg (XP-1), which are below the OCD RAL of 100 mg/kg.
- The laboratory analyses of confirmation soil samples indicate chloride concentrations ranging from below PQLs to 150 mg/kg (Source).

RCRA 8 Metals

- The laboratory analysis of the confirmation soil sample collected from the Rupture Site 2 source area ("Source") indicates an arsenic concentration of 6.9 mg/kg, which is above the NMED base-line Residential SSL of 4.25 mg/kg and below the base-line NMED Industrial SSL of 21.5 mg/kg. Available USGS data¹ suggests that background arsenic concentrations for surficial material in this region of New Mexico are >6.5 parts per million² (ppm), which would indicate that the arsenic level at Rupture Site 2 is on the lower end of anticipated background levels. Additionally, arsenic was not detected at elevated concentrations in the test water or release water samples.
- The remaining RCRA 8 analytes in the soil sample "Source", from Rupture Site 2, were detected at levels below the NMED Residential SSLs or were below the laboratory PQLs, which are below the NMED Residential SSLs.

Anions and Cations

- NMED SSLs are not established for calcium, magnesium, potassium, sodium, and sulfates. The laboratory analyses of confirmation soil samples collected from Rupture Sites 8 and 9 indicate: calcium concentrations ranging from 660 mg/kg (CP-4) to 1,900 mg/kg (CP-1); magnesium concentrations ranging from 380 mg/kg (CP-4) to 1,300 mg/kg (CP-3); potassium concentrations ranging from 370 mg/kg (CP-4) to 870 mg/kg (CP-3); sodium concentrations ranging from below PQLs to 35 mg/kg (CP-5); and sulfate concentrations ranging from 5.7 mg/kg (CP-4) to 17 mg/kg (CP-1).
- The laboratory analyses of confirmation soil samples collected from Rupture Sites 8 and 9 indicate fluoride concentrations ranging from 0.45 mg/kg (CP-4) to 2.3 mg/kg (CP-5), which are below NMED SSLs.
- The laboratory analyses of confirmation soil samples collected from Rupture Sites 8 and 9 indicate nitrate concentrations ranging from below PQLs to 1.4 mg/kg (CP-2), which are below NMED SSLs.

Confirmation sample laboratory analytical results for soils are provided in Tables 1 through 3 in Appendix C.

² Part per million is equivalent to mg/kg



4.2 Water Samples

Apex compared constituent concentrations or method PQLs associated with the water samples collected from the test-water filled pipeline and Rupture Sites 1, 2, 6, and 8 to the New Mexico Water Quality Control Commission (WQCC) Human Health Standards (HHSs), and WQCC Domestic Water Supply Standards (DWSSs).

VOCs

- The test-water sample (Header ES 480) exhibited polycyclic aromatic hydrocarbons (PAHs) at a combined concentration of 44 micrograms/liter (μg/L), which exceeds the WQCC HHS of 30 μg/L. The test-water sample (Header ES 571) exhibited a benzene concentration of 16 μg/L, which exceeds the WQCC HHS of 10 μg/L. No other VOC exceedances were identified in the test-water samples.
- No VOC exceedances were identified in the Rupture Site water samples.

Naphthalene is not listed individually as a contaminant under the NM WQCC HHSs, but is included with the PAHs.

RCRA 8 Metals

- The two (2) test-water samples exhibited barium concentrations of 0.060 milligram per liter (mg/L) (Header ES 480) and 0.090 mg/L (Header ES 571), which are below the WQCC HHS of 1.0 mg/L. Arsenic, Cadmium, Chromium, Lead, Mercury, Selenium, and Silver concentrations for the test-water samples are below PQLs, which are below applicable WQCC HHSs.
- The water samples collected from Rupture Sites 1, 6, and 8 exhibited barium concentrations ranging from 0.13 mg/L (Source) to 0.25 mg/L (Ruptures 6 and 8), which are below the WQCC HHS of 1.0 mg/L. Arsenic concentrations range from below PQLs to 0.011 mg/L (Rupture #6), which are below the WQCC HHS of 0.1 mg/L. Chromium concentrations range from below PQLs to 0.0047 mg/L (Rupture #6), which are below the WQCC HHS of 0.05 mg/L. Mercury concentrations range from below PQLs to 0.00019 mg/L (Rupture #6), which are below the WQCC HHS of 0.002 mg/L. Cadmium, Lead, Selenium, and Silver concentrations are below PQLs, which are below the applicable WQCC HHSs.

Anions and Cations

The water sample collected from Rupture 6 exhibited concentrations of fluoride (0.35 mg/L), chloride (37 mg/L), bromide (0.93 mg/L), nitrate (0.32 mg/L), sulfate (54 mg/L), calcium (44mg/L), magnesium (7.8 mg/L), potassium (19 mg/L), and sodium (18 mg/L), which are within acceptable ranges with regards to established WQCC HSSs and DWSSs.

The results of the water sample analyses are summarized in Tables 4 through 6 of Appendix C. Due to the extensive list of VOC analytes, Table 4 includes only results for analytes that exceeded the PQL in one (1) or more samples. Laboratory data sheets and chain-of-custody documentation are provided as Appendix D.



5.0 FINDINGS AND RECOMMENDATIONS

The Trunk MD 16" pipeline hydrostatic test (Ruptures 1 through 9) Sites are located within the Enterprise pipeline ROW in Section 1, Township 29 North, Range 11 West, Section 36, Township 30 North, Range 11 West, and Sections 18, 19, and 30, Township 30 North, Range 10 West, in San Juan County, New Mexico. Rupture Sites 1, 2, and 4 through 9 are located on land managed by the BLM. Rupture Site 3 is located on land owned by the State of New Mexico and managed by the New Mexico State Land Office. The Sites are surrounded by native-vegetation rangeland periodically interrupted by oil and gas gathering facilities, including the Enterprise MD 16" Trunk natural gas pipeline which traverses the area from approximately north to south.

Between June 17, 2016 and July 7, 2016, Enterprise performed a series of hydrostatic pressure tests on the Trunk MD 16" pipeline, which was separated into four test segments (Segments 1, 2A, 2B, and 3), covering a total distance of approximately 10.6 miles, to evaluate the integrity of the pipeline. The hydrostatic pressure tests ultimately resulted in nine (9) ruptures (all occurring in Segments 1 and 2A). The resulting pipeline failures were subsequently repaired by replacing pipe, and were re-tested until the entire pipeline passed the over-pressure and sustained-pressure hydrostatic tests.

- The primary objective of the ESI was to evaluate the potential impact to the environment from the released hydrostatic test water. The soils contacted by the test water (as well as the test water itself) were evaluated to determine if COCs affected the on-Site soils at concentrations above the applicable regulatory standards.
- A total of 38 confirmation flow path soil samples were collected from the nine (9) rupture locations for laboratory analyses. Based on analytical results, soils remaining in place do not exhibit COC concentrations above the OCD RALs for Site rankings of ">19".
- Sample SR SC-1 exhibited an arsenic concentration that exceeds the baseline NMED Residential SSLs, but appears to be on the lower end of the concentration range published by the USGS for this region of New Mexico.
- A total of four (4) water samples were collected from the ruptured pipeline or from standing water at Rupture Sites 1, 2, 6, and 8 for laboratory analyses. Based on analytical results, the release Site water samples exhibited COC concentrations below the NM WQCC HHSs and/or DWSSs.
- Two (2) samples of the test water from the water-filled pipeline were collected for laboratory analysis. Based on analytical results, test-water sample (Header ES 480) exhibited a combined PAH concentration above the WQCC HHS of 30 µg/L and testwater sample (Header ES 571) exhibited a benzene concentration above the WQCC HHS of 10 µg/L. No other VOC exceedances were identified in the hydrostatic test-water samples.

Based on the laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

6.0 STANDARD OF CARE, LIMITATIONS, AND RELIANCE

Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed or described herein. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g.

Enterprise Field Services, LLC Environmental Site Investigation Report Trunk MD 16" Pipeline Hydrostatic Test (Ruptures 1 through 9) September 12, 2016



laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client.

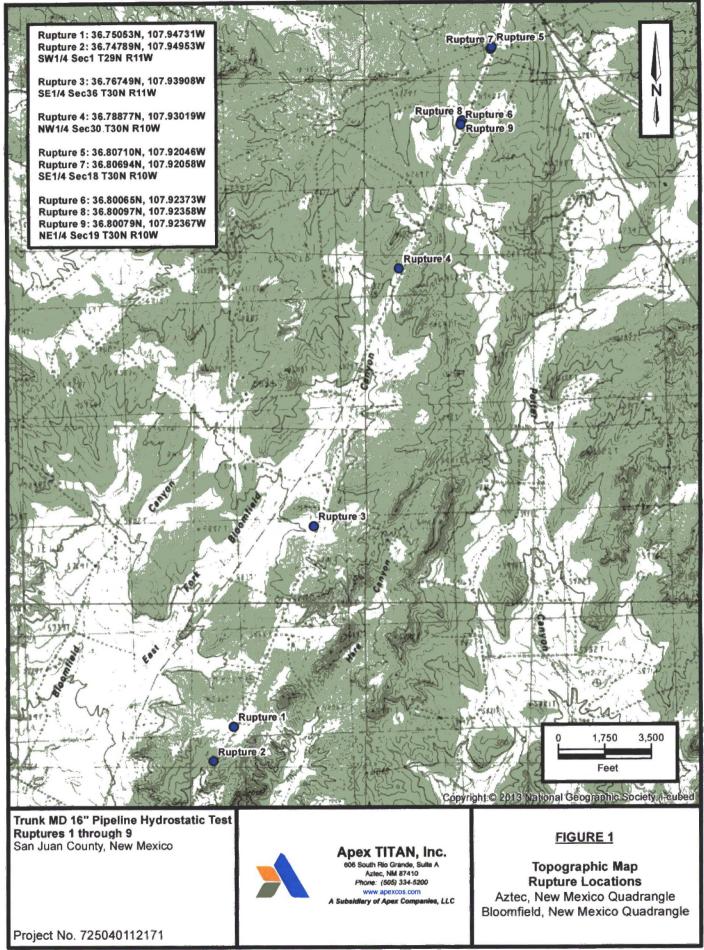
Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Apex cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.

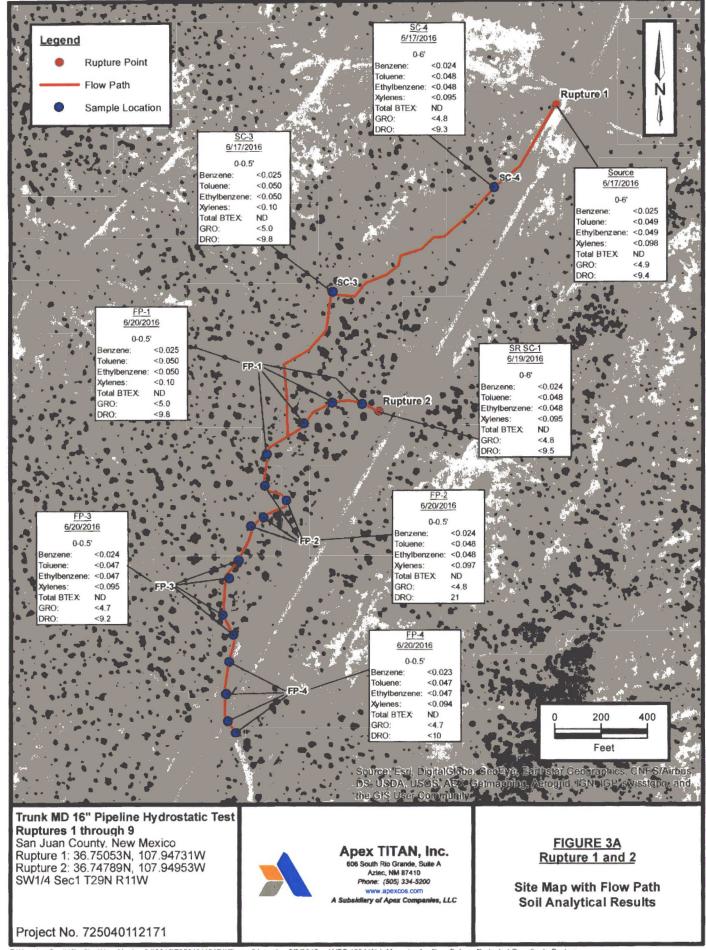


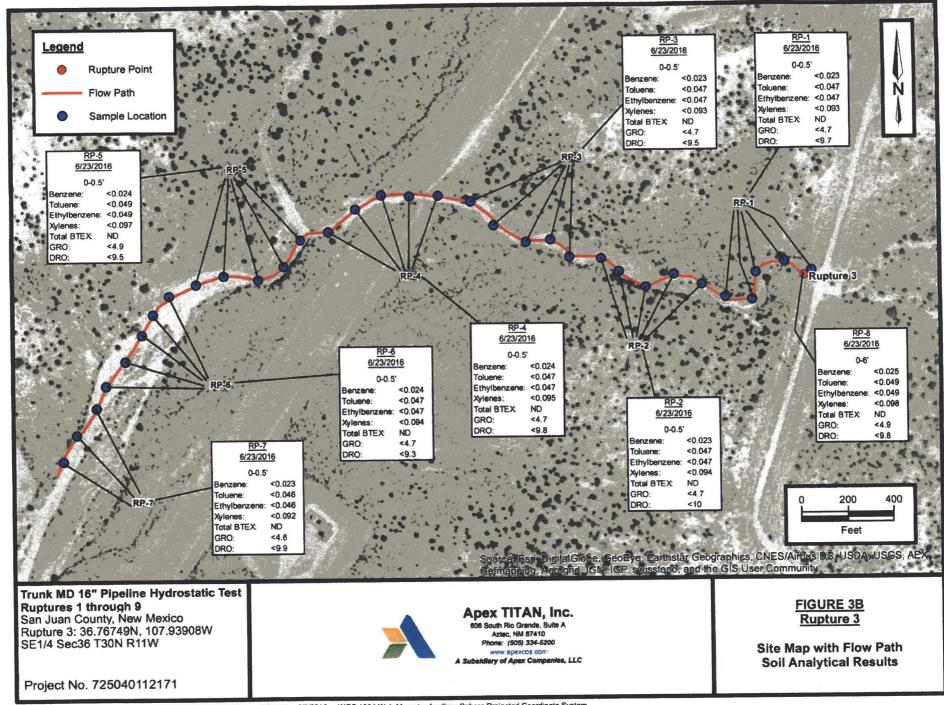
APPENDIX A

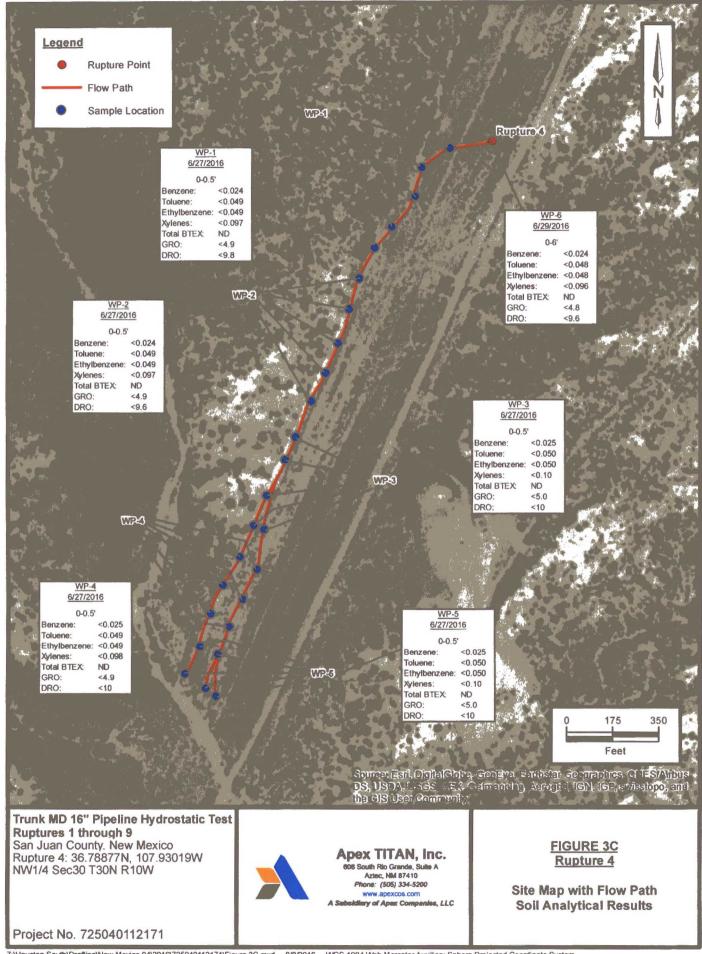
Figures

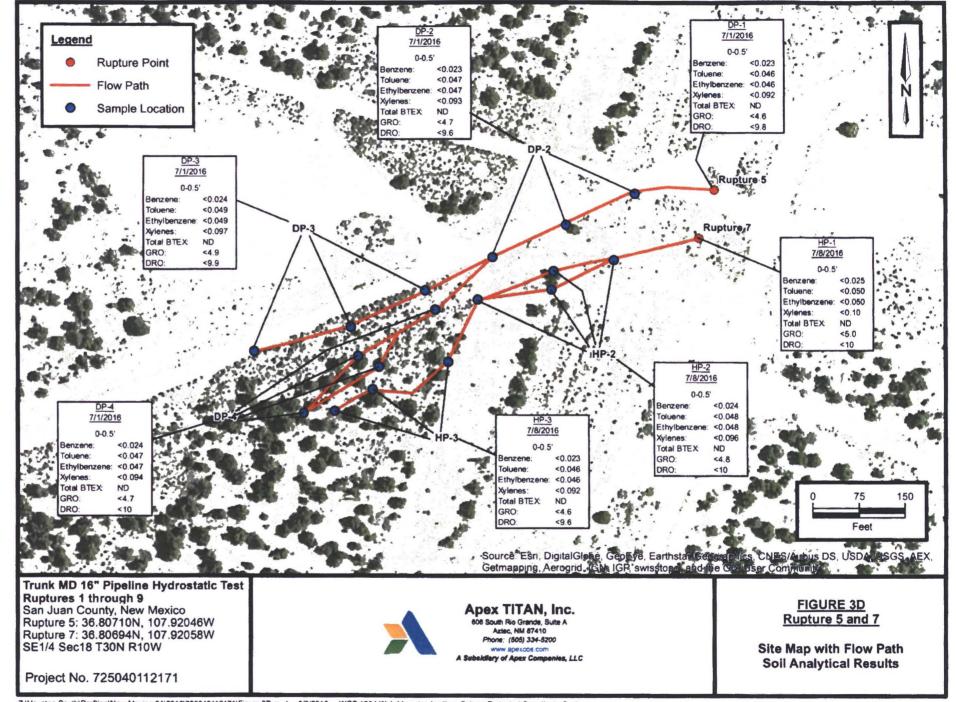


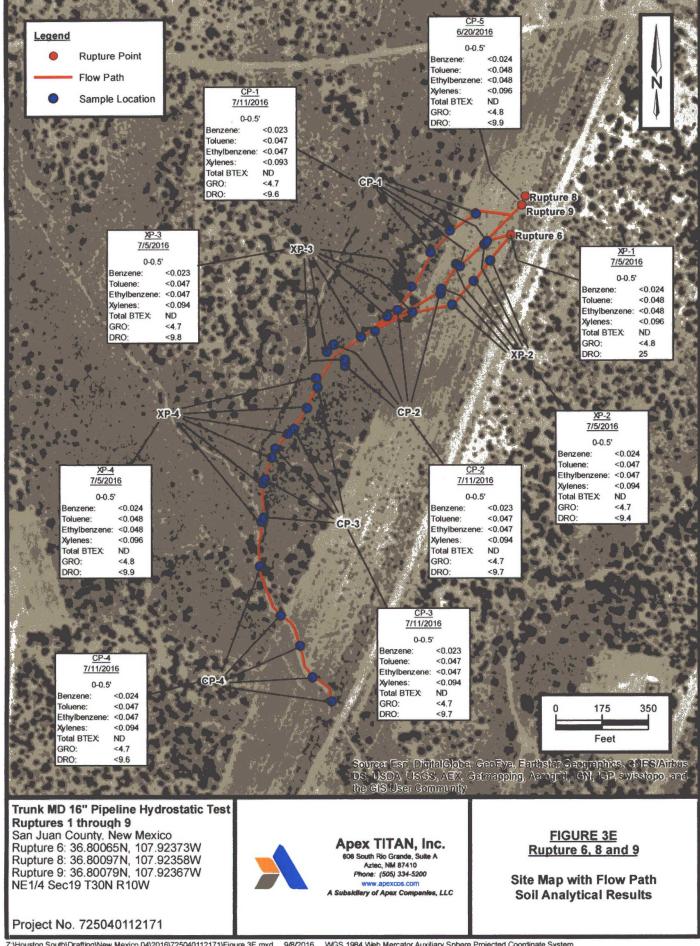














APPENDIX B

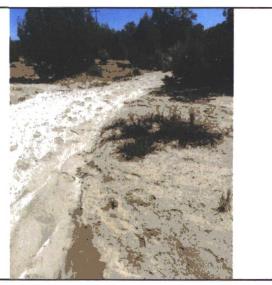
Photographic Documentation



Trunk MD 16" Pipeline Hydrostatic Test (Ruptures 1 through 9)

Photograph 1

View of the Rupture 2 flow path (midsection), facing northeast.



Photograph 2

View of the Rupture 2 flow path (southern section), facing northeast.



Photograph 3

View of the Rupture 3 source area, facing west.





Trunk MD 16" Pipeline Hydrostatic Test (Ruptures 1 through 9)

Photograph 4

View of the end of the Rupture 3 flow path, facing north.



Photograph 5

View of the Rupture 4 source area, facing west.



Photograph 6

View of the Rupture 4 flow path (midsection), facing north.





Trunk MD 16" Pipeline Hydrostatic Test (Ruptures 1 through 9)

Photograph 7

View of the Rupture 5 source area, facing northwest.



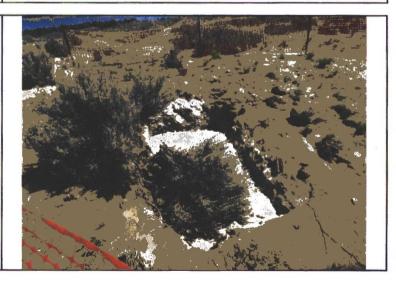
Photograph 8

View of the Rupture 5 flow path, facing southwest.



Photograph 9

View of the Rupture 6 source area, facing northwest.





Trunk MD 16" Pipeline Hydrostatic Test (Ruptures 1 through 9)

Photograph 10

View of the end of the Rupture 6 flow path, facing northwest.



Photograph 11

View of the Rupture 7 source area, facing southwest.



Photograph 12

View of the end of the Rupture 7 flow path, facing northeast.





Trunk MD 16" Pipeline Hydrostatic Test (Ruptures 1 through 9)

Photograph 13

View of the Rupture 8/9 source area, facing southwest.



Photograph 14

View of the end of the Rupture 8/9 flow path, facing northwest.





APPENDIX C

Tables



TABLE 1 Trunk MD 16" Pipeline Hydrostatic Test - (Ruptures 1 through 9) SOIL ANALYTICAL SUMMARY - BTEX, TPH, AND CHLORIDES

Sample I.D.	Date	Sample	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	ТРН	TPH	TPH	Chlorides			
		Depth (feet)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO	DRO	MRO	(mg/kg)			
		(3.2.7)				(((mg/kg)	(mg/kg)	(mg/kg)				
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level		10	NE	NE	NE	50	10		NE.	NË				
Rupture 1 Flow Path Samples														
Source	6.17.16	0 to 0.5	<0.025	<0.049	<0.049	<0.098	ND	<4.9	<9.4	<47	150			
SC-3	6.17.16	0 to 0.5	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<9.8	<49	<30			
SC-4	6.17,16	0 to 0.5	<0.024	<0.048	<0.048	<0.095	ND	<4.8	<9.3	<47	<30			
Rupture 2 Flow Path Samples														
SR SC-1	6.19.16	0 to 0.5	<0.024	<0.048	<0.048	<0.095	ND	<4.8	<9.5	NA	1.5			
FP-1	6.20.16	0 to 0.5	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<9.8	NA	<30			
FP-2	6.20.16	0 to 0.5	<0.024	<0.048	<0.048	<0.097	ND	<4.8	21	NA	<30			
FP-3	6.20.16	0 to 0.5	<0.024	<0.047	<0.047	<0.095	ND	<4.7	<9.2	NA	<30			
FP-4	6.20.16	0 to 0.5	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<10	NA	<30			
	Rupture 3 Flow Path Samples													
RP-1	6.23.16	0 to 0.5	<0.023	<0.047	<0.047	<0.093	ND	<4.7	<9.7	NA	1.5			
RP-2	6.23.16	0 to 0.5	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<10	NA	<1.5.			
RP-3	6.23.16	0 to 0.5	<0.023	<0.047	<0.047	<0.093	ND	<4.7	<9.5	NA	<30			
RP-4	6.23.16	0 to 0.5	<0.024	<0.047	<0.047	<0.095	ND	<4.7	<9.8	NA	<30			
RP-5	6.23.16	0 to 0.5	<0.024	<0.049	<0.049	<0.097	ND	<4.9	<9.5	NA	<30			
RP-6	6.23.16	0 to 0.5	<0.024	<0.047	<0.047	<0.094	ND	<4.7	<9.3	NA	<30			
RP-7	6.23.16	0 to 0.5	<0.023	<0.046	<0.046	<0.092	ND	<4.6	<9.9	NA	<30			
RP-8	6.23.16	0 to 0.5	<0.025	<0.049	<0.049	<0.098	ND	<4.9	<9.8	NA	<30			
					Rupture 4 Flow Pa	th Samples								
WP-1	6.27.16	0 to 0.5	<0.024	<0.049	<0.049	<0.097	ND	<4.9	<9.8	NA	<30			
WP-2	6.27.16	0 to 0.5	<0.024	<0.049	<0.049	<0.097	ND	<4.9	<9.6	NA	<30			
WP-3	6.27.16	0 to 0.5	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<10	NA	<30			
WP-4	6.27.16	0 to 0.5	<0.025	<0.049	<0.049	<0.098	ND	<4.9	<10	NA	<30			
WP-5	6.27.16	0 to 0.5	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<10	NA	<30			
WP-6	6.29.16	0 to 0.5	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<9.6	NA	<30			



TABLE 1
Trunk MD 16" Pipeline Hydrostatic Test - (Ruptures 1 through 9)
SOIL ANALYTICAL SUMMARY - BTEX, TPH, AND CHLORIDES

Sample I.D.	Date	Sample	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH	TPH	TPH	Chlorides
		Depth (feet)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO	DRO	MRO	(mg/kg)
		(,	(9.1.9)	(9.19)	(55)	(99/	(gg)				(9.19)
								(mg/kg)	(mg/kg)	(mg/kg)	
New Mexico Energy, Mineral & Natura Resources Department, Oil Conservation Division, Remediation Action Level		ent, Oil Remediation	10	10 NE NE		NE	50	10	00	NE	NE
					Rupture 5 Flow Pa	th Samples					
DP-1	7.01.16	0 to 0.5	<0.023	<0.046	<0.046	<0.092	ND	<4.6	<9.8	NA	<30
DP-2	7.01.16	0 to 0.5	<0.023	<0.047	<0.047	<0.093	ND	<4.7	<9.6	NA	<30
DP-3	7.01.16	0 to 0.5	<0.024	<0.049	<0.049	<0.097	ND	<4.9	<9.9	NA	<30
DP-4	7.01.16	0 to 0.5	<0.024	<0.047	<0.047	<0.094	ND	<4.7	<10	NA	<30
					Rupture 6 Flow Pa	th Samples					
XP-1	7.05.16	0 to 0.5	<0.024	<0.048	<0.048	<0.096	ND	<4.8	25	NA	<30
XP-2	7.05.16	0 to 0.5	<0.024	<0.047	<0.047	<0.094	ND	<4.7	<9.4	NA	<30
XP-3	7.05.16	0 to 0.5	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<9.8	NA	<30
XP-4	7.05.16	0 to 0.5	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<9.9	NA	<30
					Rupture 7 Flow Pa	th Samples					
HP-1	7.08.16	0 to 0.5	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<10	NA	<30
HP-2	7.08.16	0 to 0.5	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<10	NA	<30
HP-3	7.08.16	0 to 0.5	<0.023	<0.046	<0.046	<0.092	ND	<4.6	<9.6	NA	<30
					Rupture 8/9 Flow P	ath Samples					
CP-1	7.11.16	0 to 0.5	<0.023	<0.047	<0.047	<0.093	ND	<4.7	<9.6	NA	3.4 .
CP-2	7.11.16	0 to 0.5	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<9.7	NA	3.6
CP-3	7.11.16	0 to 0.5	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<9.7	NA	4.6
CP-4	7.11.16	0 to 0.5	<0.024	<0.047	<0.047	<0.094	ND	<4.7	<9.6	NA	2.5
CP-5	7.11.16	0 to 0.5	0 to 0.5 < 0.024		<0.048	<0.096	ND	<4.8	<9.9	NA	6.1

ND = Not Detected above the Laboratory Reporting Limits

NE = Not established



TABLE 2 Trunk MD 16" Pipeline Hydrostatic Test- (Ruptures 1 through 9) SOIL ANALYTICAL SUMMARY- RCRA 8 METALS

Sample I.D.	Date	Sample Depth	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Mercury Selenium				
,		(feet)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)			
		ntal Department (NMED) evels (SSLs) Residential	4.25	15,600	70.5	96.6	400	23.8	391	391			
		ntal Department (NMED) Levels (SSLs) Industrial	21.5	255,000	1,100	505	800	112	6,490	6,490			
	Rupture 2 Flow Path Sample												
SR SC-1	6.19.16	0 to 0.5	6.9	45	<0.099	1.3	3.7	<0.032	<2.5	<0.25			

Note: Concentrations in **bold** and yellow exceed a soil screening level



TABLE 3 Trunk MD 16" Pipeline Hydrostatic Test - (Ruptures 1 through 9) SOIL ANALYTICAL SUMMARY - ANION/CATIONS

Sample I.D.	Date	Sample Depth	Calcium	Magnesium	Potassium	Sodium	Fluoride	Nitrate	Sulfate
		(feet)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
		Department (NMED) s (SSLs) Residential	NE	NE	NE	NE	4,690	125,000	NE
		Department (NMED) is (SSLs) industrial	•		-		77,800	2,080,000	
			Rup	ture 8/9 Flow Path	Samples				
CP-1	7.11.16	0 to 0.5	1,900	1,100	730	<50	0.71	0.84	17
CP-2	7.11.16	0 to 0.5	790	590	550	29	0.74	1.4	11
CP-3	7.11.16	0 to 0.5	1,400	1,300	870	32	1.2	1.0	10
CP-4	7.11.16	0 to 0.5	660	380	370	<25	0.45	0.55	5.7
CP-5	7.11.16 0 to 0.5		1,100	570	440	35	2.3	<0.30	15

NE = Not established



TABLE 4 Trunk MD 16" Pipeline Hydrostatic Test - (Ruptures 1 through 9) WATER ANALYTICAL SUMMARY- Volatile Organic Compounds

Sample I.D.	Date	(h8/L)	(ha/r) Toltene	Ethylbenzene	(ha/r) Xylenes	6 1,2,4-Trimethylbenzene	6 1,3,6- Trimethylbenzene	(วา) Naphthalene (วา) (วา) (วา) (วา) (วา) (วา) (วา) (วา)		Acetone	(7/64) Bromodichloromethane	(T/64)	(7) Dibromochloromethane	(T/C) Isopropylbenzene	(7/64) n-Propylbenzene	
New Mexico Water Quality Co Human Health Sta		10	750	750	50 620 NE NE PAH-30 NE NE 100 NE NE								NE	NE		
						Pipel	ine Header Wa	ter Samples								
Header ES 480	6.17.16	7.2	31	3.7	64	50	19	23	8.9	12	50	2.7	24	<1.0	2.1	6.8
Header ES 571	6.17.16	16	58	5.6	80	25	9.3	10	<4.0	4.5	<10	4.8	19	<1.0	1.8	4.3
						R	upture 1 Water	Sample								
Source	6.16.16	3.5	43	11	120	26	12	9.1	7.4	9.8	<10	10	67	<1.0	2.6	3.1
						R	upture 2 Water									
SR WS-1	6.19.16	<1.0	1.1	<1.0	4.9	1.6	1,1	<2.0	<4.0	<4.0	<10	8.8	74	1.1	<1.0	<1.0
						R	upture 6 Water	Sample								
Rupture #6*	7.5.16	<200	<200	<200	<300	<200	<200	<400	<800	<800	<2,000	<200	85 (J)	<200	<200	<200
						R	upture 8 Water	Sample								
Rupture #8	7.9.16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<2.0	<4.0	<4.0	<10	6.6	47	<1.0	47	<1.0

Note: Concentrations in **bold** and yellow exceed a WQCC Human Health Standard.

1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, bromodichloromethane, dibromochloromethane, isopropylbenzene, and n-propylbenzene are not priority pollutants under the federal Clean Water Act (CWA) or the NM WQCC.

NE = Not Established

NA = Not Analyzed

* Sample was diluted due to TCLP reporting request.

J= Analyte dected below quantitation limits



TABLE 5 Trunk MD 16" Pipeline Hydrostatic Test - (Ruptures 1 through 9) WATER ANALYTICAL SUMMARY- RCRA 8 METALS

Sample I.D.	Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver					
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)					
New Mexico Water (Commission Human I	AND DESCRIPTION OF PERSONS ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESS	0.1	1.0	0.01	0.05	0.05	0.002	0.05	0.05					
	Pipeline Header Water Samples													
Header ES 480	6.17.16	<0.020	0.060	<0.0020	<0.0060	<0.0050	0.00023	<0.050	<0.0050					
Header ES 571	6.17.16	<0.020	0.090	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050					
				Rupture 1 W	ater Sample			10 10 10 10 10 10 10 10 10 10 10 10 10 1						
Source	6.16.16	<0.020	0.13	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050					
				Rupture 6 W	ater Sample									
Rupture #6	7.5.16	0.011 (J)	0.25	<0.0020	0.0047 (J)	<0.0050	0.00019 (J)	<0.050	<0.0050					
				Rupture 8 W	ater Sample									
Rupture #8	7.9.16	<0.020	0.25	<0.0020	<0.0060	0.0066	<0.00020	<0.050	<0.0050					

Note: All RCRA 8 Metals are priority pollutants under the NM WQCC and federal CWA except Barium. Barium is a priority pollutant under NM WQCC but not under the federal CWA.

J= Analyte dected below quantitation limits



TABLE 6

Trunk MD 16" Pipeline Hydrostatic Test - (Ruptures 1 through 9)

WATER ANALYTICAL SUMMARY- ANIONS AND CATIONS

Sample I.D.	Date	Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)		
New Mexico Water C Commission Huma Domestic Water Sup	n Health and	1.6	250	NE	10	600	NE	NE	NE	. NE		
	Rupture 6 Water Sample											
Rupture #6 7.5.16		0.35 (J)	37	0.93	0.32 (J)	54	44	7.8	19	18		

Note: Bromide, calcium, mangesium, potassium, and sodium are not priority pollutants under the federal CWA or the NM WQCC.

Chloride and sulfate priority pollutants under NM WQCC but not under the federal CWA.

NE = Not Established

J= Analyte detected below quantitation limits



APPENDIX D

Laboratory Data Sheets & Chain of Custody Documentation



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

June 27, 2016

Thomas Long
Enterprise Field Services
614 Reilly Ave.
Farmington, NM 87401

TEL: (505) 599-2141

FAX

RE: MD 16 Inch Trunk Rupture

OrderNo.: 1606A37

Dear Thomas Long:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/18/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Buly

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1606A37

Date Reported: 6/27/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: Source 36.750534-107.947310

Project: MD 16 Inch Trunk Rupture

Collection Date: 6/17/2016 8:30:00 AM

Lab ID: 1606A37-001

Matrix: SOIL

Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	150	30	mg/Kg	20	6/20/2016 4:23:06 PM	25953
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	6/20/2016 6:21:15 PM	25934
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/20/2016 6:21:15 PM	25934
Surr: DNOP	88.7	70-130	%Rec	1	6/20/2016 6:21:15 PM	25934
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/21/2016 12:52:31 PM	25948
Surr: BFB	102	80-120	%Rec	1	6/21/2016 12:52:31 PM	25948
EPA METHOD 8021B: VOLATILES					Analyst	DJF
Benzene	ND	0.025	mg/Kg	1	6/21/2016 12:52:31 PM	25948
Toluene	ND	0.049	mg/Kg	1	6/21/2016 12:52:31 PM	25948
Ethylbenzene	ND	0.049	mg/Kg	1	6/21/2016 12:52:31 PM	25948
Xylenes, Total	ND	0.098	mg/Kg	1	6/21/2016 12:52:31 PM	25948
Surr: 4-Bromofluorobenzene	114	80-120	%Rec	1	6/21/2016 12:52:31 PM	25948

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
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % 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 7 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1606A37

Date Reported: 6/27/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: SC-3 36.748655-107.950182

Project: MD 16 Inch Trunk Rupture Collection Date: 6/17/2016 9:06:00 AM

1606A37-004 Lab ID:

Matrix: SOIL

Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	6/20/2016 4:35:31 PM	25953
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/20/2016 6:49:30 PM	25934
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/20/2016 6:49:30 PM	25934
Surr: DNOP	90.2	70-130	%Rec	1	6/20/2016 6:49:30 PM	25934
EPA METHOD 8015D: GASOLINE RAN	NGE				Analys	t: DJF
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	6/21/2016 1:17:01 PM	25948
Surr: BFB	101	80-120	%Rec	1	6/21/2016 1:17:01 PM	25948
EPA METHOD 8021B: VOLATILES					Analys	t: DJF
Benzene	ND	0.025	mg/Kg	1	6/21/2016 1:17:01 PM	25948
Toluene	ND	0.050	mg/Kg	1	6/21/2016 1:17:01 PM	25948
Ethylbenzene	ND	0.050	mg/Kg	1	6/21/2016 1:17:01 PM	25948
Xylenes, Total	ND	0.10	mg/Kg	1	6/21/2016 1:17:01 PM	25948
Surr: 4-Bromofluorobenzene	115	80-120	%Rec	1	6/21/2016 1:17:01 PM	25948

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
- R RPD outside accepted recovery limits
- % 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 7 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1606A37

Date Reported: 6/27/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: SC-4 36-749991-107.948064

Project: MD 16 Inch Trunk Rupture

Collection Date: 6/17/2016 9:16:00 AM

Lab ID: 1606A37-005

Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	6/20/2016 4:47:56 PM	25953
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	6/20/2016 7:17:45 PM	25934
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/20/2016 7:17:45 PM	25934
Surr: DNOP	90.1	70-130	%Rec	1	6/20/2016 7:17:45 PM	25934
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: DJF
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/21/2016 1:41:34 PM	25948
Surr: BFB	98.8	80-120	%Rec	1	6/21/2016 1:41:34 PM	25948
EPA METHOD 8021B: VOLATILES					Analyst	DJF
Benzene	ND	0.024	mg/Kg	1	6/21/2016 1:41:34 PM	25948
Toluene	ND	0.048	mg/Kg	1	6/21/2016 1:41:34 PM	25948
Ethylbenzene	ND	0.048	mg/Kg	1	6/21/2016 1:41:34 PM	25948
Xylenes, Total	ND	0.095	mg/Kg	1	6/21/2016 1:41:34 PM	25948
Surr: 4-Bromofluorobenzene	112	80-120	%Rec	1	6/21/2016 1:41:34 PM	25948

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 7
- 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#:

1606A37

27-Jun-16

Client:

Enterprise Field Services

Project:

MD 16 Inch Trunk Rupture

Sample ID MB-25953

SampType: MBLK

TestCode: EPA Method 300.0: Anions

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 25953

RunNo: 35022

%RPD

Prep Date: **Analyte**

6/20/2016

Analysis Date: 6/20/2016

SeqNo: 1083001

Units: mg/Kg **HighLimit**

RPDLimit Qual

Chloride

Result **PQL**

1.5

SPK value SPK Ref Val %REC LowLimit

ND

Sample ID LCS-25953

SampType: LCS

Prep Date:

Client ID: LCSS

RunNo: 35022

%REC

6/20/2016

Batch ID: 25953 Analysis Date: 6/20/2016

SeqNo: 1083002

Units: mg/Kg

RPDLimit

Analyte

PQL

SPK value SPK Ref Val

LowLimit

HighLimit

Qual

Chloride

1.5 15.00

110

95.2

%RPD

Qualifiers:

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

R RPD outside accepted recovery limits

% 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

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 4 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606A37

27-Jun-16

Client:

Enterprise Field Services

Project:

MD 16 Inch Trunk Rupture

Result

Result

Result

ND

ND

10

4.5

9.0

Sample ID MB-25888

SampType: MBLK

SPK value SPK Ref Val %REC LowLimit

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

Client ID:

PBS

Batch ID: 25888

RunNo: 35005

%RPD

Prep Date:

SeqNo: 1082125

Units: %Rec

RPDLimit

Analyte

6/16/2016

Analysis Date: 6/20/2016

HighLimit

Qual

Surr: DNOP

SampType: LCS

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

Client ID:

Sample ID LCS-25888 LCSS

Batch ID: 25888

RunNo: 35005

90.4

130

Prep Date: 6/16/2016

Analysis Date: 6/20/2016

SeqNo: 1082126

Units: %Rec

Analyte

Surr: DNOP

SPK value SPK Ref Val %REC 90.3

LowLimit **HighLimit** 130 **RPDLimit** Qual

Sample ID MB-25934

SampType: MBLK

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

%RPD

Client ID: PBS

Batch ID: 25934

RunNo: 35006

Analyte

Prep Date: 6/20/2016

Analysis Date: 6/20/2016

SeqNo: 1082985

Units: mg/Kg

%RPD

PQL

SPK value SPK Ref Val %REC LowLimit

HighLimit

RPDLimit Qual

Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)

10 50

10.00

10.00

5.000

105

70

Sample ID LCS-25934

Surr: DNOP

SampType: LCS

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

SeqNo: 1082986

93.1

130

Client ID: LCSS Prep Date: 6/20/2016

Batch ID: 25934 Analysis Date: 6/20/2016

PQL

10

RunNo: 35006

Units: mg/Kg

Analyte Diesel Range Organics (DRO)

Surr: DNOP

Result 51 4.7

50.00 5.000

SPK value SPK Ref Val %REC 103

LowLimit

62.6 70

HighLimit 124 130 %RPD **RPDLimit** Qual

Page 5 of 7

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E 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

Value above quantitation range

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606A37

27-Jun-16

Client:

Enterprise Field Services

Project:

MD 16 Inch Trunk Rupture

Sample ID MB-25948

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS**

Batch ID: 25948

PQL

5.0

RunNo: 35050

Prep Date: 6/20/2016 Analysis Date: 6/21/2016

SeqNo: 1084234

LowLimit

80

80

80

LowLimit

LowLimit

59.3

80

59.3

80

Units: mg/Kg

Result

RPDLimit Qual

Gasoline Range Organics (GRO)

ND 1000

1000

25.00

1000

24.11

964.3

23.30

932.0

SPK value SPK Ref Val

SPK value SPK Ref Val %REC

SPK Ref Val

0

102

HighLimit 120

Surr: BFB

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

%RPD

Client ID: LCSS

Sample ID LCS-25948 C

Batch ID: 25948

RunNo: 35050

Prep Date:

Units: mg/Kg

Analyte

Analysis Date: 6/21/2016

SeqNo: 1084235

93.3 105

HighLimit

Surr: BFB

PQL 23 5.0 1000

SPK value SPK Ref Val %REC LowLimit

%RPD 120 120

RPDLimit Qual

Gasoline Range Organics (GRO)

Sample ID 1606A37-001AMS

SampType: MS

TestCode: EPA Method 8015D: Gasoline Range

Client ID: Source 36.750534-1

19

1000

Result

18

1000

Result

Batch ID: 25948

48

RunNo: 35050

Units: mg/Kg

143

120

Prep Date: Analyte

6/20/2016 Analysis Date: 6/21/2016 PQL Result

SPK value

SeqNo: 1084236 %REC

77.2

HighLimit

%RPD **RPDLimit** Qual

Qual

Gasoline Range Organics (GRO) Surr: BFB

SampType: MSD

105 TestCode: EPA Method 8015D: Gasoline Range

Client ID:

Source 36.750534-1

Batch ID: 25948

RunNo: 35050

Prep Date:

6/20/2016

Sample ID 1606A37-001AMSD

143

120

Analyte Gasoline Range Organics (GRO)

Surr: BFB

Analysis Date: 6/21/2016 **PQL**

4.7

SeqNo: 1084238 %REC

78.6

108

Units: mg/Kg **HighLimit**

%RPD **RPDLimit**

1.51 20 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 RPD outside accepted recovery limits R

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Sample container temperature is out of limit as specified

E Value above quantitation range

Analyte detected below quantitation limits

Page 6 of 7

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606A37

27-Jun-16

Client:

Enterprise Field Services

Project:

MD 16 Inch Trunk Rupture

Sample ID	MB-25948
-----------	----------

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

TestCode: EPA Method 8021B: Volatiles

80

Client ID: PBS

Batch ID: 25948

RunNo: 35050

Prep Date: 6/20/2016 Analysis Date: 6/21/2016

SeqNo: 1084239

Units: mg/Kg

Analyte Result

HighLimit

%RPD **RPDLimit** Qual

PQL SPK value SPK Ref Val %REC LowLimit ND 0.025 Benzene Toluene ND 0.050 ND 0.050 Ethylbenzene ND 0.10 Xylenes, Total Surr: 4-Bromofluorobenzene

1.1

1.000

1.000

113

120

Sample ID LCS-25948 Client ID: LCSS

Surr: 4-Bromofluorobenzene

SampType: LCS Batch ID: 25948

1.1

RunNo: 35050

113

Units: mg/Kg

120

Prep Date: 6/20/2016 SeqNo: 1084240 Analysis Date: 6/21/2016 Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.98 0.025 1.000 0 97.5 75.3 123 Benzene Toluene 0.85 0.050 1.000 0 84.7 80 124 0.83 0.050 1.000 0 83.3 82.8 121 Ethylbenzene 122 S 0.10 3.000 0 83.8 83.9 Xylenes, Total 2.5

Qualifiers:

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

Page 7 of 7



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: Enterprise	Work On	der Number:	1606A	37		RcptNo	1
Received by/date:	gin 6/18/2016	م 8:00:00 AM			July Mgo		
Completed By: Lindsay Man	gin 6/18/2016	8:50:35 AM			Judy Hago		:
Reviewed By:	2 00/2	1/16					
Chain of Custody	00/2	1/10					
1. Custody seals intact on sam	ple bottles?		Yes		No 🗆	Not Present	
2. Is Chain of Custody complete	te?		Yes		No 🗌	Not Present	
3. How was the sample deliver	red?		Couri	er			
Log In							
4. Was an attempt made to co	ool the samples?		Yes		No 🗀	NA 🗆	
5. Were all samples received a	at a temperature of >0° C to	6.0°C	Yes		No 🗆	NA 🗆	
6. Sample(s) in proper contain	ner(s)?		Yes		No 🗆		
7. Sufficient sample volume fo	r indicated test(s)?		Yes		No 🗆		
8. Are samples (except VOA a	nd ONG) properly preserved	d?	Yes		No 🗌	_	
9. Was preservative added to	bottles?		Yes		No 🖃	NA 🗌	
10.VOA vials have zero headsp	pace?		Yes		No 🗆	No VOA Vials	
11. Were any sample container	rs received broken?		Yes		No 🐼	# of preserved	
12.Does paperwork match bott	le labels?		Yes		No 🗆	bottles checked for pH:	
(Note discrepancies on chair						(<2	or >12 unless noted)
13. Are matrices correctly identi	ifled on Chain of Custody?		Yes		No 🗆	Adjusted?	
14. Is it clear what analyses we	re requested?		Yes		No 🗌	1	
15. Were all holding times able (If no, notify customer for au			Yes		No 🗆	Checked by:	
Special Handling (if appl	icable)						
16. Was client notified of all dis-	crepancies with this order?		Yes		No 🗆	NA 🖈	
Person Notified:		Date:					İ
By Whom:		Via:	eMa	il 🗌	Phone Fax	☐ In Person	
Regarding:						A CONTRACTOR OF THE PARTY OF TH	!
Client Instructions:							1
17. Additional remarks:							
18. Cooler Information							
Cooler No Temp °C	Condition Seal Intact	Seal No	Seal Da	ite	Signed By		
1 1.4	Good Yes						

C	Chain-of-Custody Record		ord	Turn-Arou	und T	Time:	Nex	+									-						
Client:	Enter	prise	Products		□ Stand		Rush		Day	-		H	-			EN' 'SI							
	Quera		:1		Project Na	ame	TERK	MO	16 Inch							enviror	•						•
Mailing	Address:	1.10	Reilly Ave.				Trunk	Run	ture		40	04.11								7400			
					Project #:			11-4	71-0-	1						Albuqi		••					
			m 87401		. 10,000	4.					Te	el. 50	5-34	5-39		44	505			1			
			M-23-86									<u></u>			All		lysis Request						
		Chare	e eprod. cov	7	Project M		4	1		न	only	ese				\ 000 SO	S						
	Package:			I: d = 4: = = \		-	Thomas	Long		AB's (8021)	TPH (Gas only)	(Gas/Diesel)				Q	2				1		
Stan Accredi			□ Level 4 (Full Va	lidation)	-		7-1.			H) H	(Ga				16	82			1	-		
□ NEL		□ Othe	r		Sampler:		A Yes	ValeNo. A		1	F	15B	8.1	4.	F	Z	8		7			1	S
□ EDD					The second liverage with the second liverage w	The same of the sa				1	¥	80	44	d 50	Z	a 오	des	12	9	9	- {		اع
									, 4 ¹ L,	MTBE	+ MTBE	Method 8015B	(Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals Anions (F,CI,NO ₃ ,NO ₃ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082 PCB	8260B (VOA)	(Semi-VOA)	Chloric			Air Bubbles (Y or N)
Date	Time	Matrix	Sample Requ	est ID	Contain Type and		Preservative Type		No.		×	ğ	3	S	0	§ §	1 4	0B (s) o	7			3gp
			4			- 1	1,700		7A.	BTEX	ВТЕХ	直	표		831	A K	808	826	8270	2	1	-	A
-17-16	83D	Soil	Source -107.	147310	you say	5	6001	-6	nı	7		X								X	\top	1	1
T	085		36.745						07	V		X								X	\top		
1			36,746	W38,						1		4			\top					5		+	+
+	0900	-	3674	8656	1	-	-		03			4	=	-	#	-	F	F		~	-	+	+
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4	8916	4	56-4-107.	<u> १५६८५</u>	1		<u> </u>	-6	205_	X		7	\dashv	\dashv	+	-	\vdash	┼		4	\rightarrow	+	+
	41	liv_				_			'		_		_	_	\perp		\perp	ـ	\sqcup		\rightarrow	+	
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Date:	Time:	Relinquist	ed by:		Received by	W		Date	Time	U	NE	~		_	/	1	- 0						
						Y						PE	E	10	M	LOK	5			v		,	
	f necessary.	amoles sub	mitted to Hall Environmenta	may be subc	contracted to other	ner ac	credited laboratori	es. This serve	es as notice of this	possi	bility.	Any su	b-cont	racted	data w	Il be clea	irly not	ated o	n the a	nalytica	al report		



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

June 29, 2016

Thomas Long
Enterprise Field Services
614 Reilly Ave.
Farmington, NM 87401

Farmington, NM 87401 TEL: (505) 599-2141

FAX

RE: Trunk MD 16 Inch

OrderNo.: 1606A36

Dear Thomas Long:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/18/2016 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued June 27, 2016.

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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

Broke

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1606A36

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: Source 36.750534-107.947310

Project: Trunk MD 16 Inch

Collection Date: 6/16/2016 8:40:00 PM

Lab ID: 1606A36-001

Matrix: AQUEOUS

Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY					Analyst	pmf
Mercury	ND	0.00020	mg/L	1	6/20/2016 3:48:59 PM	25939
EPA 6010B: TOTAL RECOVERABLE	METALS				Analyst	MED
Arsenic	ND	0.020	mg/L	1	6/21/2016 8:20:18 AM	25941
Barium	0.13	0.020	mg/L	1	6/21/2016 8:20:18 AM	25941
Cadmium	ND	0.0020	mg/L	1	6/21/2016 8:20:18 AM	25941
Chromium	ND	0.0060	mg/L	1	6/21/2016 8:20:18 AM	25941
Lead	ND	0.0050	mg/L	1	6/21/2016 8:20:18 AM	25941
Selenium	ND	0.050	mg/L	1	6/21/2016 8:20:18 AM	25941
Silver	ND	0.0050	mg/L	1	6/21/2016 8:20:18 AM	25941
EPA METHOD 8260B: VOLATILES					Analyst	BCN
Benzene	3.5	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
Toluene	43	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
Ethylbenzene	11	1.0	µg/L	1	6/21/2016 5:23:00 PM	R3507
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
1,2,4-Trimethylbenzene	26	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
1,3,5-Trimethylbenzene	12	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
1,2-Dibromoethane (EDB)	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
Naphthalene	9.1	2.0	µg/L	1	6/21/2016 5:23:00 PM	R3507
1-Methylnaphthalene	7.4	4.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
2-Methylnaphthalene	9.8	4.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
Acetone	ND	10	μg/L	1	6/21/2016 5:23:00 PM	R3507
Bromobenzene	ND	1.0	µg/L	1	6/21/2016 5:23:00 PM	R3507
Bromodichloromethane	10	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
Bromoform	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
Bromomethane	ND	3.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
2-Butanone	ND	10	μg/L	1	6/21/2016 5:23:00 PM	R3507
Carbon disulfide	ND	10	μg/L	1	6/21/2016 5:23:00 PM	R3507
Carbon Tetrachloride	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
Chlorobenzene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
Chloroethane	ND	2.0	µg/L	1	6/21/2016 5:23:00 PM	R3507
Chloroform	67	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
Chloromethane	ND	3.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
2-Chlorotoluene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
4-Chlorotoluene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
cis-1,2-DCE	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	6/21/2016 5:23:00 PM	R3507

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606A36

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: Source 36.750534-107.947310

Project: Trunk MD 16 Inch Collection Date: 6/16/2016 8:40:00 PM

1606A36-001 Lab ID:

Matrix: AQUEOUS

Received Date: 6/18/2016 8:00:00 AM

nalyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	BCN
Dibromochloromethane	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
Dibromomethane	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
1,2-Dichlorobenzene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
1,3-Dichlorobenzene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R3507
1,4-Dichlorobenzene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
Dichlorodifluoromethane	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,1-Dichloroethane	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,1-Dichloroethene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,2-Dichloropropane	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,3-Dichloropropane	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
2,2-Dichloropropane	ND	2.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,1-Dichloropropene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
Hexachlorobutadiene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
2-Hexanone	ND	10	μg/L	1	6/21/2016 5:23:00 PM	R350
Isopropylbenzene	2.6	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
4-Isopropyltoluene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
4-Methyl-2-pentanone	ND	10	μg/L	1	6/21/2016 5:23:00 PM	R350
Methylene Chloride	ND	3.0	μg/L	1	6/21/2016 5:23:00 PM	R350
n-Butylbenzene	ND	3.0	μg/L	1	6/21/2016 5:23:00 PM	R350
n-Propylbenzene	3.1	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
sec-Butylbenzene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
Styrene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
tert-Butylbenzene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	6/21/2016 5:23:00 PM	R350
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
trans-1,2-DCE	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,1,1-Trichloroethane	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,1,2-Trichloroethane	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
Trichloroethene (TCE)	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
Trichlorofluoromethane	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
1,2,3-Trichloropropane	ND	2.0	μg/L	1	6/21/2016 5:23:00 PM	R350
Vinyl chloride	ND	1.0	μg/L	1	6/21/2016 5:23:00 PM	R350
Xylenes, Total	120	1.5	μg/L	1	6/21/2016 5:23:00 PM	R350
Surr: 1,2-Dichloroethane-d4	85.8	70-130	%Rec	1	6/21/2016 5:23:00 PM	R350
Surr: 4-Bromofluorobenzene	96.5	70-130	%Rec	1	6/21/2016 5:23:00 PM	R350

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 H
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % 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 15 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1606A36

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: Source 36.750534-107.947310

Project: Trunk MD 16 Inch

Collection Date: 6/16/2016 8:40:00 PM

Lab ID: 1606A36-001

Matrix: AQUEOUS

Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	desult PQL Qual Units		DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: BCN
Surr: Dibromofluoromethane	93.6	70-130	%Rec	1	6/21/2016 5:23:00 PM	R35071
Surr: Toluene-d8	98.6	70-130	%Rec	1	6/21/2016 5:23:00 PM	R35071

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606A36

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: Header ES 480

Project: Trunk MD 16 Inch

Collection Date: 6/17/2016 12:03:00 PM

Lab ID: 1606A36-002

Matrix: AQUEOUS

Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY					Analyst	pmf
Mercury	0.00023	0.00020	mg/L	1	6/20/2016 3:55:06 PM	25939
EPA 6010B: TOTAL RECOVERABLE	METALS				Analyst	MED
Arsenic	ND	0.020	mg/L	1	6/21/2016 8:23:51 AM	25941
Barium	0.060	0.020	mg/L	1	6/21/2016 8:23:51 AM	25941
Cadmium	ND	0.0020	mg/L	1	6/21/2016 8:23:51 AM	25941
Chromium	ND	0.0060	mg/L	1	6/21/2016 8:23:51 AM	25941
Lead	ND	0.0050	mg/L	1	6/21/2016 8:23:51 AM	25941
Selenium	ND	0.050	mg/L	1	6/21/2016 8:23:51 AM	25941
Silver	ND	0.0050	mg/L	1	6/21/2016 8:23:51 AM	25941
EPA METHOD 8260B: VOLATILES					Analyst	BCN
Benzene	7.2	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Toluene	31	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Ethylbenzene	3.7	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
1,2,4-Trimethylbenzene	50	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
1,3,5-Trimethylbenzene	19	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R350
Naphthalene	23	2.0	μg/L	1	6/21/2016 6:34:00 PM	R350
1-Methylnaphthalene	8.9	4.0	μg/L	1	6/21/2016 6:34:00 PM	R350
2-Methylnaphthalene	12	4.0	µg/L	1	6/21/2016 6:34:00 PM	R350
Acetone	50	10	µg/L	1	6/21/2016 6:34:00 PM	R350
Bromobenzene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
Bromodichloromethane	2.7	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
Bromoform	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
Bromomethane	ND	3.0	μg/L	1	6/21/2016 6:34:00 PM	R350
2-Butanone	ND	10	μg/L	1	6/21/2016 6:34:00 PM	R350
Carbon disulfide	ND	10	μg/L	1	6/21/2016 6:34:00 PM	R350
Carbon Tetrachloride	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R350
Chlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Chloroethane	ND	2.0	μg/L	1	6/21/2016 6:34:00 PM	R350
Chloroform	24	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
Chloromethane	ND	3.0	μg/L	1	6/21/2016 6:34:00 PM	R350
2-Chlorotoluene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
4-Chlorotoluene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
cis-1,2-DCE	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R350
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	6/21/2016 6:34:00 PM	R350

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606A36

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: Header ES 480

Trunk MD 16 Inch Project:

Collection Date: 6/17/2016 12:03:00 PM

1606A36-002 Lab ID:

Matrix: AQUEOUS Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	BCN
Dibromochloromethane	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Dibromomethane	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,2-Dichlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,3-Dichlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,4-Dichlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Dichlorodifluoromethane	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,1-Dichloroethane	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,1-Dichloroethene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,2-Dichloropropane	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,3-Dichloropropane	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
2,2-Dichloropropane	ND	2.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,1-Dichloropropene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Hexachlorobutadiene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
2-Hexanone	ND	10	μg/L	1	6/21/2016 6:34:00 PM	R3507
Isopropylbenzene	2.1	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
4-Isopropyltoluene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
4-Methyl-2-pentanone	ND	10	μg/L	1	6/21/2016 6:34:00 PM	R3507
Methylene Chloride	ND	3.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
n-Butylbenzene	ND	3.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
n-Propylbenzene	6.8	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
sec-Butylbenzene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Styrene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
tert-Butylbenzene	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R3507
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R3507
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Tetrachloroethene (PCE)	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R3507
trans-1,2-DCE	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R3507
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,1,1-Trichloroethane	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,1,2-Trichloroethane	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Trichloroethene (TCE)	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Trichlorofluoromethane	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
1,2,3-Trichloropropane	ND	2.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Vinyl chloride	ND	1.0	μg/L	1	6/21/2016 6:34:00 PM	R3507
Xylenes, Total	64	1.5	µg/L	1	6/21/2016 6:34:00 PM	R3507
Surr: 1,2-Dichloroethane-d4	87.6	70-130	%Rec	1	6/21/2016 6:34:00 PM	R3507
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	6/21/2016 6:34:00 PM	R3507

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
- R RPD outside accepted recovery limits
- % 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 5 of 15 J
- Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1606A36

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Project: Trunk MD 16 Inch

Lab ID: 1606A36-002 Client Sample ID: Header ES 480

Collection Date: 6/17/2016 12:03:00 PM

Matrix: AQUEOUS Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analy	st: BCN
Surr: Dibromofluoromethane	94.2	70-130	%Rec	1	6/21/2016 6:34:00 PM	R35071
Surr: Toluene-d8	97.3	70-130	%Rec	1	6/21/2016 6:34:00 PM	R35071

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
- RPD outside accepted recovery limits
- % 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 Page 6 of 15 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1606A36

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: Header ES 571

Project:

Trunk MD 16 Inch

Collection Date: 6/17/2016 11:39:00 AM

Lab ID:

1606A36-003

Matrix: AQUEOUS

Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batcl
EPA METHOD 7470: MERCURY					Analyst	pmf
Mercury	ND	0.00020	mg/L	1	6/20/2016 3:57:08 PM	25939
EPA 6010B: TOTAL RECOVERABLE I	METALS				Analyst	MED
Arsenic	ND	0.020	mg/L	1	6/21/2016 8:25:02 AM	2594
Barium	0.090	0.020	mg/L	1	6/21/2016 8:25:02 AM	2594
Cadmium	ND	0.0020	mg/L	1	6/21/2016 8:25:02 AM	2594
Chromium	ND	0.0060	mg/L	1	6/21/2016 8:25:02 AM	2594
Lead	ND	0.0050	mg/L	1	6/21/2016 8:25:02 AM	2594
Selenium	ND	0.050	mg/L	1	6/21/2016 8:25:02 AM	2594
Silver	ND	0.0050	mg/L	1	6/21/2016 8:25:02 AM	2594
EPA METHOD 8260B: VOLATILES					Analyst	BCN
Benzene	16	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
Toluene	58	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
Ethylbenzene	5.6	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
1,2,4-Trimethylbenzene	25	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
1,3,5-Trimethylbenzene	9.3	1.0	μg/L	1	6/21/2016 6:58:00 PM	R35
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
1,2-Dibromoethane (EDB)	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R35
Naphthalene	10	2.0	μg/L	1	6/21/2016 6:58:00 PM	R35
1-Methylnaphthalene	ND	4.0	μg/L	1	6/21/2016 6:58:00 PM	R35
2-Methylnaphthalene	4.5	4.0	μg/L	1	6/21/2016 6:58:00 PM	R35
Acetone	ND	10	μg/L	1	6/21/2016 6:58:00 PM	R35
Bromobenzene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R35
Bromodichloromethane	4.8	1.0	μg/L	1	6/21/2016 6:58:00 PM	R35
Bromoform	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R35
Bromomethane	ND	3.0	μg/L	1	6/21/2016 6:58:00 PM	R35
2-Butanone	ND	10	μg/L	1	6/21/2016 6:58:00 PM	R35
Carbon disulfide	ND	10	μg/L	1	6/21/2016 6:58:00 PM	R350
Carbon Tetrachloride	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R35
Chlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R35
Chloroethane	ND	2.0	µg/L	1	6/21/2016 6:58:00 PM	R350
Chloroform	19	1.0	μg/L	1	6/21/2016 6:58:00 PM	R35
Chloromethane	ND	3.0	μg/L	1	6/21/2016 6:58:00 PM	R350
2-Chlorotoluene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R35
4-Chlorotoluene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
cis-1,2-DCE	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R35
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	6/21/2016 6:58:00 PM	R350

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606A36

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: Header ES 571

Project: Trunk MD 16 Inch Collection Date: 6/17/2016 11:39:00 AM

Lab ID: 1606A36-003

Matrix: AQUEOUS

Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	BCN
Dibromochloromethane	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
Dibromomethane	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,2-Dichlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,3-Dichlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,4-Dichlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
Dichlorodifluoromethane	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,1-Dichloroethane	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,1-Dichloroethene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,2-Dichloropropane	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,3-Dichloropropane	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
2,2-Dichloropropane	ND	2.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,1-Dichloropropene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
Hexachlorobutadiene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
2-Hexanone	ND	10	μg/L	1	6/21/2016 6:58:00 PM	R350
Isopropylbenzene	1.8	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
4-Isopropyltoluene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
4-Methyl-2-pentanone	ND	10	μg/L	1	6/21/2016 6:58:00 PM	R350
Methylene Chloride	ND	3.0	μg/L	1	6/21/2016 6:58:00 PM	R350
n-Butylbenzene	ND	3.0	μg/L	1	6/21/2016 6:58:00 PM	R350
n-Propylbenzene	4.3	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
sec-Butylbenzene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
Styrene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
tert-Butylbenzene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
trans-1,2-DCE	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,1,1-Trichloroethane	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
1,1,2-Trichloroethane	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
Trichloroethene (TCE)	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
Trichlorofluoromethane	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
1,2,3-Trichloropropane	ND	2.0	μg/L	1	6/21/2016 6:58:00 PM	R3507
Vinyl chloride	ND	1.0	μg/L	1	6/21/2016 6:58:00 PM	R350
Xylenes, Total	80	1.5	μg/L	1	6/21/2016 6:58:00 PM	R3507
Surr: 1,2-Dichloroethane-d4	86.3	70-130	%Rec	1	6/21/2016 6:58:00 PM	R3507
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	6/21/2016 6:58:00 PM	R3507

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
- RPD outside accepted recovery limits
- % 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 15 J
- Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1606A36

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Trunk MD 16 Inch Project:

Client Sample ID: Header ES 571

Collection Date: 6/17/2016 11:39:00 AM

Lab ID: 1606A36-003 Matrix: AQUEOUS Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: BCN
Surr: Dibromofluoromethane	94.0	70-130	%Rec	1	6/21/2016 6:58:00 PM	R35071
Surr: Toluene-d8	97.7	70-130	%Rec	1	6/21/2016 6:58:00 PM	R35071

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
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % 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 15 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#:

1606A36

29-Jun-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID tune 6	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	ID: R3	5071	F	RunNo: 3	5071				
Prep Date:	Analysis D	ate: 6/	21/2016	5	SeqNo: 1	084527	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

- 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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 10 of 15

- 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#:

1606A36

29-Jun-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID tune 6	SampType: MBLK			Tes	Code: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	ID: R3	5071	R	RunNo: 3	5071				
Prep Date:	Analysis D	ate: 6/	21/2016	S	SeqNo: 1	084527	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane Surr: Toluene-d8	9.4 9.9		10.00 10.00		94.4 99.4	70 70	130 130			
- I didding do	0.0		10.00		00.4	,0	100			

Sample ID	1606a36-001ams	SampType	. MS		rest	Code: E	PA Method	8260B: VOLA	ATILES		
Client ID:	Source 36.750534-1	Batch ID:	R3	5071	R	RunNo: 35071					
Prep Date:	Ar	21/2016	S	SeqNo: 1084538 Units: μg/L							
Analyte	F	Result P	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		23	1.0	20.00	3.962	97.6	70	130			
Toluene		63	1.0	20.00	46.34	81.3	70	130			

Qualifiers:

Chlorobenzene

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

21

1.0

20.00

- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

70

130

E Value above quantitation range

103

J Analyte detected below quantitation limits

Page 11 of 15

- 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#:

1606A36 29-Jun-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID 1606a36-001ams

SampType: MS

TestCode: EPA Method 8260B: VOLATILES

Client ID: Source 36.750534-1

Batch ID: R35071

RunNo: 35071

Pren Date:

Analysis Date: 6/21/2016

SeaNo: 1084538

Units: ua/l

Frep Date.	Allalysis D	ale. o/	21/2016		eqivo.	004530	Utilis. µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	101	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.7	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.4	70	130			
Surr: Dibromofluoromethane	9.4		10.00		93.9	70	130			
Surr: Toluene-d8	10		10.00		99.7	70	130			

Sample ID 1606a36-001amsd

SampType: MSD

TestCode: EPA Method 8260B: VOLATILES

Client ID: Source 36.750534-1

Batch ID: R35071

RunNo: 35071

Prep Date:	Analysis D	ate: 6/	21/2016	S	SeqNo: 1	084539	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24 1.0 20.00		3.962	3.962 98.2 70		130	0.467	20		
Toluene	61	1.0	20.00	46.34	74.8	70	130	2.09	20	
Chlorobenzene	20	1.0	20.00	0	101	70	130	2.01	20	
1,1-Dichloroethene	19	1.0	20.00	0	0 93.7 70		130	7.96	20	
Trichloroethene (TCE)	19	1.0	20.00	0	0 95.9 70		130	5.55	20	
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.3	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130	0	0	
Surr: Dibromofluoromethane	9.5	9.5 10.00		95.3		70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.0	70	130	0		

Sample ID 100ng Ics	SampT	ype: LC	s	Test	Code: El	ATILES				
Client ID: LCSW	Batch	ID: R3	5071	R	tunNo: 3	5071				
Prep Date:	Analysis D	ate: 6/	21/2016	S	SeqNo: 1	084542	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	96.1	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	8.7		10.00		86.9	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.0	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

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
- RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Analyte detected in the associated Method Blank

Page 12 of 15

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606A36 29-Jun-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID MB-25939

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Client ID:

PBW

Batch ID: 25939

PQL

RunNo: 35037

Prep Date: 6/20/2016 Analysis Date: 6/20/2016

Result

SeqNo: 1083381

Units: mg/L

HighLimit

%RPD

RPDLimit Qual

Analyte Mercury

ND 0.00020

Sample ID LCS-25939

SampType: LCS

TestCode: EPA Method 7470: Mercury

Client ID: LCSW

Batch ID: 25939

RunNo: 35037

Units: mg/L

120

Prep Date: 6/20/2016

Analysis Date: 6/20/2016

SeqNo: 1083382

Analyte

PQL Result 0.0048 0.00020

SPK value SPK Ref Val 0.005000

%REC LowLimit 96.3

HighLimit

%RPD **RPDLimit**

Mercury

SPK value SPK Ref Val %REC LowLimit

TestCode: EPA Method 7470: Mercury

%RPD

Qual

Sample ID 1606A36-001BMS

Source 36.750534-1

SampType: MS

RunNo: 35037

80

Client ID: Prep Date:

6/20/2016

Batch ID: 25939 Analysis Date: 6/20/2016

SeqNo: 1083384

100

Units: mg/L

Analyte

SPK value SPK Ref Val Result PQL 0.005000

%REC LowLimit HighLimit

RPDLimit Qual

Mercury

0.0050 0.00020

TestCode: EPA Method 7470: Mercury

0

Client ID: Prep Date: 6/20/2016

Source 36.750534-1

Sample ID 1606A36-001BMSD

SampType: MSD Batch ID: 25939

RunNo: 35037

Analyte

Analysis Date: 6/20/2016

SeqNo: 1083385

%REC

Units: mg/L HighLimit

RPDLimit Qual

Mercury

PQL SPK value SPK Ref Val 0.0050 0.00020 0.005000

99.5

LowLimit

125

%RPD 0.754

20

Qualifiers:

R

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND RPD outside accepted recovery limits

% 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 13 of 15

Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606A36

29-Jun-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID	MB-25941	Samp	Type: ME	BLK	Tes	tCode: E	PA 6010B:	Total Recover	rable Meta	als	
Client ID:	PBW	Bato	h ID: 25	941	R	RunNo: 3	5033				
Prep Date:	6/20/2016	Analysis I	Date: 6/	21/2016	S	SeqNo: 1	083100	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic		ND	0.020								
Barium		ND	0.020								
Cadmium		ND	0.0020								
Chromium		ND	0.0060								
Lead		ND	0.0050								
Selenium		ND	0.050								
Silver		ND	0.0050								

Sample ID LCS-25941	SampType: LC	s	Tes	als					
Client ID: LCSW	Batch ID: 25	941	F	RunNo: 3	5033				
Prep Date: 6/20/2016	Analysis Date: 6/	21/2016	8	SeqNo: 10	083101	Units: mg/L			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50 0.020	0.5000	0	101	80	120			
Barium	0.49 0.020	0.5000	0	98.3	80	120			
Cadmium	0.49 0.0020	0.5000	0	98.9	80	120			
Chromium	0.49 0.0060	0.5000	0	98.7	80	120			
Lead	0.49 0.0050	0.5000	0	98.4	80	120			
Selenium	0.51 0.050	0.5000	0	103	80	120			
Silver	0.10 0.0050	0.1000	0	99.6	80	120			

Sample ID	1606A36-001BMS	Samp	Type: MS	3	TestCode: EPA 6010B: Total Recoverable Metals								
Client ID:	Source 36.750534	-1 Bato	h ID: 25	941	F	RunNo: 3	5033						
Prep Date:	6/20/2016	Analysis	Date: 6/	21/2016	8	SeqNo: 1	083104	Units: mg/L					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Arsenic		0.52	0.020	0.5000	0	104	75	125					
Barium		0.62	0.020	0.5000	0.1331	96.6	75	125					
Cadmium		0.49	0.0020	0.5000	0	97.3	75	125					
Chromium		0.48	0.0060	0.5000	0.003980	95.4	75	125					
Lead		0.48	0.0050	0.5000	0	95.3	75	125					
Selenium		0.50	0.050	0.5000	0	99.9	75	125					
Silver		0.099	0.0050	0.1000	0	98.6	75	125					

Sample ID 1606A36	-001BMSD Samp	Гуре: МЅ	SD	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: Source 3	6.750534-1 Batc	h ID: 259	941	R	RunNo: 3	35033					
Prep Date: 6/20/20	16 Analysis [Date: 6/	21/2016	S	SeqNo: 1	1083105	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	0.52	0.020	0.5000	0	104	75	125	0.110	20		

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 14 of 15

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#:

1606A36

29-Jun-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample	ID	16
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606A36-001BMSD

SampType: MSD

TestCode: EPA 6010B: Total Recoverable Metals

Batch ID: 25941

RunNo: 35033

Client ID: Source 36.750534-1

Prep Date: 6/20/2016	Analysis (Date: 6/	21/2016	S	SeqNo: 1	083105	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Barium	0.60	0.020	0.5000	0.1331	94.2	75	125	1.93	20				
Cadmium	0.49	0.0020	0.5000	0	97.4	75	125	0.0801	20				
Chromium	0.48	0.0060	0.5000	0.003980	95.7	75	125	0.330	20				
Lead	0.48	0.0050	0.5000	0	95.6	75	125	0.340	20				
Selenium	0.52	0.050	0.5000	0	103	75	125	3.42	20				
Silver	0.098 0.0050 0.1000		0	0 97.6 75		125	1.07	20					

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
- RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Analyte detected in the associated Method Blank

Page 15 of 15



Hall 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 Name: Enterp	rise	Work Or	der Number:	1606/	36			RcptNo:	1
Received by/date: Logged By: Linds	ay Mangin	0 C 1 6/18/2016	8 1 6 8:00:00 AM			July My	20		
Completed By: Linds	ay Mangin		8:43:53 AM			July Ally	PD CO		ļ
Reviewed By:	2	06/2	0/16						i
Chain of Custody	1	04/	7,						
1. Custody seals intact	on sample bottles?			Yes		No 🗆	Not Pres	sent 🖈	
2. Is Chain of Custody	complete?			Yes		No 🗆	Not Pres	sent 🗌	
3. How was the sample	e delivered?			Cour	ier				
Log In									
4. Was an attempt ma	de to cool the sampl	es?		Yes		No 🗆]	NA 🗆	
5. Were all samples re	ceived at a temperat	ture of >0° C to	6.0°C	Yes		No 🗆		NA 🗆	
6. Sample(s) in proper	container(s)?			Yes		No 🗆]		
7. Sufficient sample vo	lume for indicated te	st(s)?		Yes		No []		
8. Are samples (except	t VOA and ONG) pro	perly preserved	17	Yes		No []		
9. Was preservative ad	ided to bottles?			Yes		No 🗹	3	NA 🗌	
10.VOA vials have zero	headspace?			Yes		No 🗆	No VOA V	/ials	
11. Were any sample of	ontainers received be	roken?		Yes		No M			
					_		# of prese		
12.Does paperwork ma	tch bottle labels? on chain of custody)	i		Yes		No L	for pH:	(<2	or >12 unless noted)
13. Are matrices correct	•			Yes		No [] Adju	usted?	,
14. Is it clear what analy				Yes		No []		
15. Were all holding time	es able to be met? er for authorization.)			Yes		No 🗆] Chec	cked by:	
Special Handling (i	f applicable)								
16. Was client notified of	of all discrepancies w	ith this order?		Yes		No .]	NA 🜌	
Person Notifie	d:		Date:	-AC-LINE					
By Whom:		AMAL BUTTON AND AN AND AND AND	Via:	eMa	uil [Phone Fa	ax In Perso	n	
Regarding:								and the second	
Client Instructi	ions:								•
17. Additional remarks:									
18. Cooler Information	1								
	mp °C Condition		Seal No	Seal D	ate	Signed By			
1 1.4	Good	Yes							

																		ia Company			TO. 4 E 400					
	ate:	12/1									~	4	16-6	Jate	ED	NELAP	cred	Star		Tail or F		[]	Sullie		lent:	
f necessary,	Time:	Time:									1139	1903	apple	Time	EDD (Type)	P	creditation	Standard	VOC Package	hail or Fax#	* C.		ailing Address: 614	Sed		hain
samples sut	Relinguis	Relinquished by									-		nation (Matrix		□ Other							510) ×	peratine	Haterprise	of-C
omitted to Hall	jished by:	hed by: Bond									Header	Header	1 Source			ег		□ Level	1	1.	900	MCM	70			ustody
Environmental ma	0	dere									145 ST	ひ	167-6443 to 1919	Sample Request ID				☐ Level 4 (Full Validation)	1	2000	70760		L As		Products	Chain-of-Custody Record
y be subcor		`									4	480	915			1		ation)	-							ď
ntracted to other ac	Received by:	Received by:									4		36245	Container Type and #	Sample Tem	Obles	Sampler	,	Tojour manager	Project Mans		Project #:		Project Name:	□ Standard	Turn-Around Time:
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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.	Date Thing	Date Time									- M3	182	100-	TV TITLE				Sys					5	r mp	المحل)	Next
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HALL ENVIRONMENTAL ANALYSIS LABORATORY

Air Bubbles (Y or N)



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

July 14, 2016

Thomas Long
Enterprise Field Services
614 Reilly Ave.
Farmington, NM 87401
TEL: (505) 599-2141

FAX

RE: Trunk MD 16 Inch

OrderNo.: 1606B73

Dear Thomas Long:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/21/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Brokel

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1606B73

Date Reported: 7/14/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Project: Trunk MD 16 Inch

Lab ID: 1606B73-001

Client Sample ID: SR SC-1

Collection Date: 6/19/2016 1:30:00 PM

Received Date: 6/21/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	LGT
Chloride	1.5	1.5	mg/Kg	1	6/24/2016 5:25:57 PM	26073
EPA METHOD 7471: MERCURY					Analyst	pmf
Mercury	ND	0.032	mg/Kg	1	6/24/2016 12:20:25 PM	26037
EPA METHOD 6010B: SOIL METALS					Analyst	MED
Arsenic	6.9	2.5	mg/Kg	1	6/30/2016 10:22:10 AM	26038
Barium	45	0.099	mg/Kg	1	6/30/2016 10:22:10 AM	26038
Cadmium	ND	0.099	mg/Kg	1	6/27/2016 11:39:27 AM	26038
Chromium	1.3	0.30	mg/Kg	1	6/27/2016 11:39:27 AM	26038
Lead	3.7	0.25	mg/Kg	1	6/30/2016 10:22:10 AM	26038
Selenium	ND	2.5	mg/Kg	1	6/30/2016 10:22:10 AM	26038
Silver	ND	0.25	mg/Kg	1	6/27/2016 11:39:27 AM	26038
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst:	TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	6/27/2016 3:45:24 PM	25992
Surr: DNOP	94.6	70-130	%Rec	1	6/27/2016 3:45:24 PM	25992
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/27/2016 1:21:07 AM	25994
Surr: BFB	99.2	80-120	%Rec	1	6/27/2016 1:21:07 AM	25994
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.024	mg/Kg	1	6/27/2016 1:21:07 AM	25994
Toluene	ND	0.048	mg/Kg	1	6/27/2016 1:21:07 AM	25994
Ethylbenzene	ND	0.048	mg/Kg	1	6/27/2016 1:21:07 AM	25994
Xylenes, Total	ND	0.095	mg/Kg	1	6/27/2016 1:21:07 AM	25994
Surr: 4-Bromofluorobenzene	96.2	80-120	%Rec	1	6/27/2016 1:21:07 AM	25994

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606B73

Date Reported: 7/14/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Project: Trunk MD 16 Inch

Lab ID: 1606B73-002

Client Sample ID: SR WS-1

Collection Date: 6/19/2016 12:05:00 PM

Matrix: AQUEOUS Received Date: 6/21/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	DJF
Benzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Toluene	1.1	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Ethylbenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,2,4-Trimethylbenzene	1.6	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,3,5-Trimethylbenzene	1.1	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,2-Dibromoethane (EDB)	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Naphthalene	ND	2.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1-Methylnaphthalene	ND	4.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
2-Methylnaphthalene	ND	4.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Acetone	ND	10	μg/L	1	6/27/2016 9:17:19 PM	A3524
Bromobenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Bromodichloromethane	8.8	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Bromoform	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Bromomethane	ND	3.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
2-Butanone	ND	10	µg/L	1	6/27/2016 9:17:19 PM	A3524
Carbon disulfide	ND	10	µg/L	1	6/27/2016 9:17:19 PM	A3524
Carbon Tetrachloride	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Chlorobenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Chloroethane	ND	2.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Chloroform	74	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Chloromethane	ND	3.0	µg/L	1	6/27/2016 9:17:19 PM	A3524
2-Chlorotoluene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
4-Chlorotoluene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
cis-1,2-DCE	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A3524
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35244
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Dibromochloromethane	1.1	1.0	μg/L	1	6/27/2016 9:17:19 PM	A35244
Dibromomethane	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A35244
1,2-Dichlorobenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,3-Dichlorobenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A35244
1,4-Dichlorobenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A35244
Dichlorodifluoromethane	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A35244
1,1-Dichloroethane	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,1-Dichloroethene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A3524
1,2-Dichloropropane	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,3-Dichloropropane	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
2,2-Dichloropropane	ND	2.0	µg/L	1	6/27/2016 9:17:19 PM	A35244

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606B73

Date Reported: 7/14/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Trunk MD 16 Inch **Project:**

1606B73-002 Lab ID:

Client Sample ID: SR WS-1

Collection Date: 6/19/2016 12:05:00 PM

Matrix: AQUEOUS Received Date: 6/21/2016 8:00:00 AM

nalyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	DJF
1,1-Dichloropropene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Hexachlorobutadiene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
2-Hexanone	ND	10	μg/L	1	6/27/2016 9:17:19 PM	A3524
Isopropylbenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
4-Isopropyltoluene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
4-Methyl-2-pentanone	ND	10	μg/L	1	6/27/2016 9:17:19 PM	A3524
Methylene Chloride	ND	3.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
n-Butylbenzene	ND	3.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
n-Propylbenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
sec-Butylbenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Styrene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
tert-Butylbenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
trans-1,2-DCE	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,1,1-Trichloroethane	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,1,2-Trichloroethane	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Trichloroethene (TCE)	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Trichlorofluoromethane	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
1,2,3-Trichloropropane	ND	2.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Vinyl chloride	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A3524
Xylenes, Total	4.9	1.5	μg/L	1	6/27/2016 9:17:19 PM	A3524
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	6/27/2016 9:17:19 PM	A3524
Surr: 4-Bromofluorobenzene	98.7	70-130	%Rec	1	6/27/2016 9:17:19 PM	A3524
Surr: Dibromofluoromethane	99.7	70-130	%Rec	1	6/27/2016 9:17:19 PM	A3524
Surr: Toluene-d8	92.5	70-130	%Rec	1	6/27/2016 9:17:19 PM	A3524

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
- RPD outside accepted recovery limits
- % 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 3 of 13 J
- Sample pH Not In Range P
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606B73

14-Jul-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID MB-26073

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 26073

PQL

RunNo: 35186

6/24/2016

SPK value SPK Ref Val %REC

SPK value SPK Ref Val %REC

SeqNo: 1088718

Units: mg/Kg

Prep Date: Analyte

Analysis Date: 6/24/2016

HighLimit

%RPD **RPDLimit** Qual

Chloride

ND 1.5

Result

TestCode: EPA Method 300.0: Anions

Client ID:

LCSS

SampType: LCS Batch ID: 26073

RunNo: 35186

LowLimit

LowLimit

Prep Date:

Sample ID LCS-26073

Units: mg/Kg

6/24/2016

Analysis Date: 6/24/2016

SeqNo: 1088719

HighLimit

%RPD **RPDLimit**

Qual

Analyte Chloride

15.00

93.2

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

RPD outside accepted recovery limits

% 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 4 of 13

Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606B73

14-Jul-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID	MB-25992
-----------	----------

SampType: MBLK

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

Client ID: PBS

Batch ID: 25992

RunNo: 35221

Prep Date:

6/22/2016

Analysis Date: 6/27/2016

SegNo: 1089257

Units: mg/Kg

Analyte Result PQL ND Range Organics (DRO)

10

HighLimit %RPD

RPDLimit Qual

Surr: DNOP

89

10.00

88.6

130

Sample ID LCS-25992

SampType: LCS

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

Client ID: LCSS Prep Date: 6/22/2016

Batch ID: 25992

52

4.8

Result

39

41

4.3

5.000

45.87

46.90

4.690

RunNo: 35221 SeqNo: 1089274

Units: mg/Kg

Analyte Diesel Range Organics (DRO) Analysis Date: 6/27/2016

SPK value SPK Ref Val

SPK value SPK Ref Val %REC

2.122

2.122

SPK value SPK Ref Val %REC

%REC Lowl imit 62.6

LowLimit

70

70

33.9

33.9

70

70

%RPD

RPDLimit Qual

Result PQL

10

50.00

103 96.6 HighLimit 124

130

Surr: DNOP

Sample ID 1606B73-001AMS

SampType: MS

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

Client ID: SR SC-1 Batch ID: 25992

RunNo: 35219

141

130

Prep Date: 6/22/2016

Analysis Date: 6/27/2016

PQL

SeqNo: 1089739

80.5

93.9

Units: mg/Kg

LowLimit **HighLimit** %RPD **RPDLimit** Qual

Analyte Range Organics (DRO) Surr: DNOP

9.2 4.3 4.587

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

Client ID: SR SC-1

Sample ID 1606B73-001AMSD

SampType: MSD Batch ID: 25992

RunNo: 35219

Prep Date:

6/22/2016

Analysis Date: 6/27/2016

SegNo: 1089740

Units: mg/Kg

Analyte Diesel Range Organics (DRO)

Surr: DNOP

Result PQL 9.4

SPK value SPK Ref Val %REC LowLimit 82.9

923

HighLimit

141

130

%RPD **RPDLimit**

4.91 20 0 0

Page 5 of 13

Qual

Qualifiers:

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

RPD outside accepted recovery limits R % Recovery outside of range due to dilution or matrix Analyte detected in the associated Method Blank

E Value above quantitation range

Reporting Detection Limit

Analyte detected below quantitation limits

Sample pH Not In Range

RL

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606B73

14-Jul-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID MB-25994

SampType: MBLK

SPK value SPK Ref Val

SPK value SPK Ref Val

25.00

1000

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

PBS

Batch ID: 25994

PQL

RunNo: 35223

%REC

Prep Date: 6/22/2016

Analysis Date: 6/27/2016

Result

Result

28

1100

SeqNo: 1089084

LowLimit

LowLimit

80

80

59.3

80

Units: mg/Kg

HighLimit

RPDLimit Qual

Analyte Gasoline Range Organics (GRO) Surr: BFB

Client ID:

ND 5.0 990

1000

99.1

80

%RPD

Sample ID LCS-25994

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Prep Date: 6/22/2016

LCSS

Batch ID: 25994

5.0

RunNo: 35223

111

109

Analyte

Analysis Date: 6/27/2016 POL

SeqNo: 1089085 %REC

Units: mg/Kg

120

120

HighLimit %RPD 120

RPDLimit Qual

Gasoline Range Organics (GRO) Surr: BFB

Sample ID 1606B73-001AMS

SampType: MS

0

TestCode: EPA Method 8015D: Gasoline Range

Client ID: SR SC-1 Batch ID: 25994

RunNo: 35223

Prep Date: 6/22/2016

Analysis Date: 6/27/2016

SeqNo: 1089087

Units: mg/Kg

Analyte Gasoline Range Organics (GRO) Result **PQL** 24 5.0 24.80

SPK value SPK Ref Val %REC LowLimit 96.5

HighLimit %RPD 143

120

RPDLimit Qual

0

Page 6 of 13

Qual

Surr: BFB

SampType: MSD

TestCode: EPA Method 8015D: Gasoline Range

107

Client ID: Prep Date:

SR SC-1 6/22/2016

Sample ID 1606B73-001AMSD

Batch ID: 25994

PQL

RunNo: 35223

Analyte Gasoline Range Organics (GRO) Result

25

1100

Analysis Date: 6/27/2016

SeqNo: 1089088 %REC

Units: mg/Kg

HighLimit %RPD **RPDLimit** 20

Surr: BFB

4.8 1000

24.06 962.5

992.1

SPK value SPK Ref Val

103 109 59.3 80

LowLimit

143 120

3.16 0

Qualifiers:

R

- 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
- RPD outside accepted recovery limits % 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
- Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606B73

14-Jul-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID MB-25994

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

Client ID:

PBS

Batch ID: 25994

RunNo: 35223

Prep Date: 6/22/2016 Analysis Date: 6/27/2016

0.97

SeqNo: 1089121

SPK value SPK Ref Val %REC LowLimit

Units: mg/Kg

HighLimit

%RPD

%RPD

RPDLimit

RPDLimit Qual

Qual

Analyte Result PQL 0.025 Benzene ND ND 0.050 Toluene ND 0.050 Ethylbenzene Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene

LCSS

1.000

96.8

120

Sample ID LCS-25994

Batch ID: 25994

SampType: LCS

RunNo: 35223

TestCode: EPA Method 8021B: Volatiles

Prep Date:

Client ID:

6/22/2016

Analysis Date: 6/27/2016

SeqNo: 1089124

Units: mg/Kg

Analyte PQL SPK value SPK Ref Val %REC HighLimit Result LowLimit 1.1 0.025 1.000 0 106 75.3 123 Benzene Toluene 1.1 0.050 1.000 0 108 80 124 Ethylbenzene 1.1 0.050 1.000 0 109 82.8 121 Xylenes, Total 3.2 0.10 3.000 0 107 83.9 122 1.0 105 120 Surr: 4-Bromofluorobenzene 1.000 80

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % 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 7 of 13

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606B73

14-Jul-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID	rb
-----------	----

SampType: MBLK

TestCode: EPA Method 8260B: VOLATILES

Client ID: PBW

Batch ID: A35244

RunNo: 35244

Client ID. PDV	Dato	IID. A	3244		dillao. 3	3244				
Prep Date:	Analysis D	ate: 6	27/2016	8	SeqNo: 1	089953	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								

Qualifiers:

1,3-Dichloropropane

2,2-Dichloropropane

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

ND

ND

1.0

2.0

- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 8 of 13

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606B73

14-Jul-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID rb	SampT	ype: ME	BLK	Tes	Code: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	ID: A3	5244	R	unNo: 3	5244				
Prep Date:	Analysis D	ate: 6/	27/2016	S	eqNo: 1	089953	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.8	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.7	70	130			
Surr: Toluene-d8	9.4		10.00		93.9	70	130			
Sample ID 100ng Ics	SampTy	ype: LC	S	Test	TestCode: EPA Method 8260B: VOLATILES					
Client ID: LCSW	Batch	ID: A3	5244	R	unNo: 3	5244				

Sample ID 100ng Ics	SampT	ype: LC	S	Test	tCode: El					
Client ID: LCSW	Batch	ID: A3	5244	R	RunNo: 3					
Prep Date:	Analysis D	ate: 6/	27/2016	S	SeqNo: 1	089954	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	18	1.0	20.00	0	91.4	70	130			
Chlorobenzene	18	1.0	20.00	0	90.1	70	130			

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 9 of 13

- 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#:

1606B73 14-Jul-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID 100ng Ics	SampType: LCS			Tes	tCode: El	ATILES				
Client ID: LCSW	Batch ID: A35244			F	RunNo: 3	5244				
Prep Date:	Analysis Date: 6/27/2016			S	SeqNo: 1089954 Units: µ					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	101	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.5	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.1	70	130			
Surr: Toluene-d8	9.1		10.00		90.9	70	130			

Qualifiers:

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

Page 10 of 13

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606B73

14-Jul-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID MB-26037

SampType: MBLK

TestCode: EPA Method 7471: Mercury

Client ID: Prep Date:

PBS

6/23/2016

Batch ID: 26037

RunNo: 35191

Analysis Date: 6/24/2016 Result

SeqNo: 1088910

Units: mg/Kg

HighLimit

RPDLimit

Analyte Mercury

ND 0.033

PQL

Sample ID LCS-26037

SampType: LCS

TestCode: EPA Method 7471: Mercury

Client ID: LCSS Prep Date:

Batch ID: 26037

RunNo: 35191

Units: mg/Kg

120

Analysis Date: 6/24/2016

SeqNo: 1088911

Analyte

6/23/2016

SPK value SPK Ref Val %REC

0

SPK value SPK Ref Val %REC LowLimit

LowLimit **HighLimit**

%RPD

Mercury

Result PQL 0.17 0.033

0.1667

102

80

RPDLimit

Qual

Qual

Sample ID 1606B73-001AMS

SampType: MS

TestCode: EPA Method 7471: Mercury

Client ID: SR SC-1 Prep Date: 6/23/2016

Sample ID 1606B73-001AMSD

SR SC-1

6/23/2016

Batch ID: 26037 Analysis Date: 6/24/2016 RunNo: 35191 SeqNo: 1088913

Units: mg/Kg

Analyte

Client ID:

Prep Date:

Result 0.17

PQL

SPK value SPK Ref Val 0.1620 0.003284

%REC LowLimit **HighLimit**

%RPD

%RPD

RPDLimit

Qual

Qual

Mercury

SampType: MSD

TestCode: EPA Method 7471: Mercury

Result

0.18

Batch ID: 26037

PQL

0.033

RunNo: 35191

SeqNo: 1088914

105

75

Units: mg/Kg

Analyte Mercury

Analysis Date: 6/24/2016

SPK value SPK Ref Val

0.003284

%REC

LowLimit

HighLimit 125 %RPD 4.59 **RPDLimit**

20

Qualifiers:

ND

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- RPD outside accepted recovery limits

Not Detected at the Reporting Limit

- % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- Value above quantitation range
- J Analyte detected below quantitation limits
- Page 11 of 13

- 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#: 1606B73

14-Jul-16

Client:

Enterprise Field Services

Project:	Trunk MI	O 16 Inch										
Samplé ID	MB-26038	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	6010B: Soil	Metals		,	
Client ID:	PBS	Batch	1D: 26	038	F	RunNo: 3	5227					
Prep Date:	6/23/2016	Analysis D	ate: 6/	27/2016	SeqNo: 1089173			Units: mg/k	Units: mg/Kg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic		ND	2.5									
Barium		ND	0.10									
Cadmium		ND	0.10									
Chromium		ND	0.30									
Lead		ND	0.25									
Selenium		ND	2.5									
Silver		ND	0.25									
Sample ID	LCS-26038	SampT	ype: LC	s	Tes	tCode: El	PA Method	6010B: Soil	Metals			
Client ID:	LCSS	Batch	1D: 26	038	F	RunNo: 3	5227					
Prep Date:	6/23/2016	Analysis Date: 6/27/2016			SeqNo: 1089174			Units: mg/Kg				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic		23	2.5	25.00	0	93.0	80	120				
Barium		23	0.10	25.00	0	93.0	80	120				
Cadmium		24	0.10	25.00	0	95.4	80	120				
Chromium		23	0.30	25.00	0	92.8	80	120				
Lead		22	0.25	25.00	0	89.1	80	120				
Selenium		24	2.5	25.00	0	95.8	80	120				
Silver		4.8	0.25	5.000	0	95.4	80	120				
Sample ID	1606B73-001AMS	SampT	ype: MS	3	Tes	tCode: El	PA Method	6010B: Soil	Metals			
Client ID:	SR SC-1	Batch	ID: 26	038	F	RunNo: 3	5227					
Prep Date:	6/23/2016	Analysis D	ate: 6/	27/2016	8	SeqNo: 1	089256	Units: mg/k	(g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Cadmium		20	0.099	24.81	0	79.1	75	125				
Chromium		20	0.30	24.81	1.261	76.5	75	125				
Silver		4.0	0.25	4.961	0	81.3	75	125				
Sample ID	1606B73-001AMSI	SampT	ype: MS	SD	Tes	tCode: El	PA Method	6010B: Soil	Metals			
Client ID:	SR SC-1	Batch	ID: 26	038	F	RunNo: 3	5227					
Prep Date:	6/23/2016	Analysis D	ate: 6/	27/2016	8	SeqNo: 1	089278	Units: mg/K	(g			
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Cadmium		21	0.10	25.14	0	83.2	75	125	6.36	20		
Chromium		22	0.30	25.14	1.261	83.3	75	125	9.21	20		
Silver		4.2	0.25	5.027	0	84.3	75	125	4.90	20		

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 12 of 13

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#:

1606B73

14-Jul-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID	1606B73-001AMS
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SampType: MS

TestCode: EPA Method 6010B: Soil Metals

Client ID: SR SC-1

Batch ID: 26038

RunNo: 35332

Pren Date: 6/23/2016

Analysis Date: 6/30/2016

SeaNo: 1003135

Unite: malka

11ep Date. 0/23/2010	Allalysis	alc. U/	30/2010	Ocq140. 1093133 Offics. 1				9		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	26	2.5	24.81	6.922	77.0	75	125			
Barium	61	0.099	24.81	45.48	60.7	75	125			S
Lead	23	0.25	24.81	3.701	79.2	75	125			
Selenium	22	2.5	24.81	0	86.9	75	125			

Sample ID 1606B73-001AMSD SampType: MSD

TestCode: EPA Method 6010B: Soil Metals

Client ID: SR SC-1

Batch ID: 26038

RunNo: 35332

Prep Date:	6/23/2016	Analysis Date: 6/30/2016			S	SeqNo: 10	093136	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic		27	2.5	25.14	6.922	78.0	75	125	1.96	20	
Barium		83	0.10	25.14	45.48	148	75	125	30.8	20	RS
Lead		24	0.25	25.14	3.701	80.3	75	125	2.33	20	
Selenium		21	2.5	25.14	0	83.6	75	125	2.56	20	

Sample ID 1606B73-001APS

SampType: PS

TestCode: EPA Method 6010B: Soil Metals

Client ID: SR SC-1

Batch ID: 26038

RunNo: 35332

Prep Date:

Analysis Date: 6/30/2016

SeqNo: 1093137

Units: mg/Kg

%RPD

RPDLimit

Qual

SPK value SPK Ref Val %REC LowLimit Analyte **PQL HighLimit** Barium 0.099 24.82 45.48 109

Qualifiers:

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

RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range

J Analyte detected below quantitation limits

Page 13 of 13

P Sample pH Not In Range

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: Enterp	orise	Work Order Number:	16068	373			Rcpt	No: 1
Received by/date:	M	06/21/16						
Logged By: Joe A	Archuleta	6/21/2016 8:00:00 AM			H. Cas			
Completed By: Joe A	Archuleta	6/21/2016 3:04:21 PM			11.14			
Reviewed By:	17	6121 116						
Chain of Custody								
1. Custody seals intac	t on sample bottles?		Yes	[7]	No	1.1	Not Present	
2. Is Chain of Custody	complete?		Yes		No		Not Present	
3. How was the sample	e delivered?		Cour	ier				
Log in								
4. Was an attempt ma	nde to cool the samples?	?	Yes		No	Į. J	NA	[_]
5. Were all samples re	eceived at a temperature	of >0° C to 6.0°C	Yes		No	[-]	NA I	1
6. Sample(s) in prope	r container(s)?		Yes		No	[]		
7. Sufficient sample vo	olume for indicated test(s)?	Yes		No			
8. Are samples (excep	t VOA and ONG) prope	rly preserved?	Yes		No	[]		
9. Was preservative ac	dded to bottles?		Yes		No		NA	
10.VOA vials have zero	headspace?		Yes		No		No VOA Vials	["]
	containers received brok	en?	Yes		No			
							# of preserved bottles checked	d
12. Does paperwork ma	atch bottle labels? s on chain of custody)		Yes		No	<u>L</u> J	for pH:	(<2 or >12 unless noted)
13. Are matrices correct		Custody?	Yes		No	[]	Adjusted	?
14. Is it clear what analy			Yes		No			
15. Were all holding tim (If no, notify custom	nes able to be met? ner for authorization.)		Yes		No		Checked	by:
Special Handling (if applicable)							
16. Was client notified of	of all discrepancies with	this order?	Yes		No	L.I	NA	
Person Notifie	ed:	Date	Carabaran Mil		Cardid Milhald , who of Mahad Chic.	ellesidd		
By Whom:		Via:	eMa	ail [Phone []	Fax	[] In Person	
Regarding:	Phillippi i Phillippi derivir als absorbit ingen			nicident subtent	ns Ardbuildbalends enen Arbbilands i	Pinathorn	a direktoria apopograf manusa auransakilika ki	•••
Client Instruct	ions:	eltekolisten elekstelen satuat erreskolistele kusikide edederud elek	- Gudd - skinelikisk	Aldressed with	barrene floe velanračente šklišší, neu tráucen	whetheren .en	diserbacerativa tilisahan directive totte selvera vitte trivit e	
17. Additional remarks	:							
18. Cooler Informatio								
Cooler No Ter	mp °C Condition S Good Ye		Seal D	ate	Signed B	Ву		
1. 5.5		-					I	

			stody Record	Turn-Around	Time:		HALL ENVIRONMENTAL					L							
ient:	Linte	prix	Products	Standard														TOF	
0	perati	2	Reilly Act.	Project Name	Frunk	MO 16 Inch	-			W	ww.t	allen	viron	men	tal.co	om			
ailing	Address	614	Reiller Are.					490)1 Ha	awkin	s NE	- Al	buqu	erqu	e. N	M 87	7109		
Des	ningt	en No	in 87401	Project #:				Te	. 50	5-345	-397	5	Fax	505-	345	410	7		
none a	#: 50	5-59	9-27-86				Analysis Request												
		tilong	eeprodicom	Project Mana	_	,	SSO ₂)												
Stan	Package:		☐ Level 4 (Full Validation)		Thomas	long	TPH (Gas onl 7 DRO ≠MR 1) 270 SIMS) 270 SIMS) 270 SIMS)												
_	tation		E LOVE - T (1 OIL VAIIGABOT!)	Sampler:	750		70 S (1.1) 19 H (1.1) 19 NO ₂ .												
NEL		□ Othe	r	On Ice:	⊔ Yes	LI No	IF	+	RO	118.	904	200	0	8/8		(A)	5		or N)
EDD	(Type)			Sample Tom	perature: 3,	5	BTEX + MTBE + TMB's (8021) BTEX + MTBE + TPH (Gas only) TPH 80158 (GRO / DRO + MRO) TPH 80158 (GRO / DRO + MRO) TPH (Method 418.1) EDB (Method 504.1) PAH's (8310 or 8270 SIMS) RCRA 8 Metals Anions (F.CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄) 8081 Pesticides / 8082 PCB's 8260B (VOA) 8270 (Semi-VOA)					S (Y							
Date	Time	Matrix	Sample Request ID	Container	Preservative	HEAL No.	+	W + X	8015	(Meth	(Mett	A 8 N	ns (F.	Pest	8260B (VOA)	(Sen	loa		Bubbles
				Type and #	Туре	1606B13	BTEX	BTEX	TPH	TP.	EDB	RCR.	Anior	8081	8260	8270	2		Air B
1-16	1330	Soil	SR SC-1	402 For	(ම්)	-001	X		X			X					X		
		Coate	SR 605-2	2 VoA's	Hyciz	-002	1		7			6			X				
					10						_								
										_	_	_	-			_			
							-			_	+		-		_				
							-		-	+	+	+	-	-	-	-			
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2-16		y	con too	X	700	24/4 0800)												
ite:	Time	Relingtish	ed by:	Received by:	2 061	Date Time													
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

June 29, 2016

Kyle Summers APEX TITAN 606 S. Rio Grande Unit A

Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: Trunk MD 16" Hydro

OrderNo.: 1606B27

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/21/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to 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

Buly

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1606B27

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Trunk MD 16" Hydro

Lab ID: 1

1606B27-001

Client Sample ID: FP-1

Collection Date: 6/20/2016 10:50:00 AM

Received Date: 6/21/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	6/24/2016 5:02:07 AM	26042
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/23/2016 4:46:52 PM	25944
Surr: DNOP	108	70-130	%Rec	1	6/23/2016 4:46:52 PM	25944
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: DJF
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	6/22/2016 5:00:53 PM	25976
Surr: BFB	99.4	80-120	%Rec	1	6/22/2016 5:00:53 PM	25976
EPA METHOD 8021B: VOLATILES					Analys	t: DJF
Benzene	ND	0.025	mg/Kg	1	6/22/2016 5:00:53 PM	25976
Toluene	ND	0.050	mg/Kg	1	6/22/2016 5:00:53 PM	25976
Ethylbenzene	ND	0.050	mg/Kg	1	6/22/2016 5:00:53 PM	25976
Xylenes, Total	ND	0.10	mg/Kg	1	6/22/2016 5:00:53 PM	25976
Surr: 4-Bromofluorobenzene	95.1	80-120	%Rec	1	6/22/2016 5:00:53 PM	25976

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits 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 1606B27

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Trunk MD 16" Hydro

Lab ID: 1606B27-002

Project:

Client Sample ID: FP-2

Collection Date: 6/20/2016 11:00:00 AM

Received Date: 6/21/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	6/24/2016 5:14:31 AM	26042
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	•			Analys	t: JME
Diesel Range Organics (DRO)	21	9.9	mg/Kg	1	6/23/2016 5:08:37 PM	25944
Surr: DNOP	107	70-130	%Rec	1	6/23/2016 5:08:37 PM	25944
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: DJF
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/22/2016 6:11:39 PM	25976
Surr: BFB	97.6	80-120	%Rec	1	6/22/2016 6:11:39 PM	25976
EPA METHOD 8021B: VOLATILES					Analys	t: DJF
Benzene	ND	0.024	mg/Kg	1	6/22/2016 6:11:39 PM	25976
Toluene	ND	0.048	mg/Kg	1	6/22/2016 6:11:39 PM	25976
Ethylbenzene	ND	0.048	mg/Kg	1	6/22/2016 6:11:39 PM	25976
Xylenes, Total	ND	0.097	mg/Kg	1	6/22/2016 6:11:39 PM	25976
Surr: 4-Bromofluorobenzene	96.3	80-120	%Rec	1	6/22/2016 6:11:39 PM	25976

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

Lab Order 1606B27

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: FP-3

Project:

Trunk MD 16" Hydro

Collection Date: 6/20/2016 11:10:00 AM

Lab ID:

1606B27-003

Matrix: SOIL

Received Date: 6/21/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	ND	30	mg/Kg	20	6/24/2016 11:50:52 A	M 26073
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analys	st: JME
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	6/23/2016 5:30:31 PM	25944
Surr: DNOP	107	70-130	%Rec	1	6/23/2016 5:30:31 PM	25944
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	st: DJF
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/22/2016 7:22:36 PM	25976
Surr: BFB	97.2	80-120	%Rec	1	6/22/2016 7:22:36 PM	25976
EPA METHOD 8021B: VOLATILES					Analys	st: DJF
Benzene	ND	0.024	mg/Kg	1	6/22/2016 7:22:36 PM	25976
Toluene	ND	0.047	mg/Kg	1	6/22/2016 7:22:36 PM	25976
Ethylbenzene	ND	0.047	mg/Kg	1	6/22/2016 7:22:36 PM	25976
Xylenes, Total	ND	0.095	mg/Kg	1	6/22/2016 7:22:36 PM	25976
Surr: 4-Bromofluorobenzene	94.4	80-120	%Rec	1	6/22/2016 7:22:36 PM	25976

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
- R RPD outside accepted recovery limits
- S % 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 3 of 9 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1606B27

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: FP-4

Project: Trunk MD 16" Hydro

Collection Date: 6/20/2016 11:20:00 AM

Lab ID: 1606B27-004

Matrix: SOIL Receive

Received Date: 6/21/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	ND	30	mg/Kg	20	6/24/2016 12:28:05 P	M 26073
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analys	st: JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/23/2016 5:52:18 PM	25944
Surr: DNOP	109	70-130	%Rec	1	6/23/2016 5:52:18 PM	25944
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	st: DJF
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/22/2016 7:46:09 PM	25976
Surr: BFB	102	80-120	%Rec	1	6/22/2016 7:46:09 PM	25976
EPA METHOD 8021B: VOLATILES					Analys	st: DJF
Benzene	ND	0.023	mg/Kg	1	6/22/2016 7:46:09 PM	25976
Toluene	ND	0.047	mg/Kg	1	6/22/2016 7:46:09 PM	25976
Ethylbenzene	ND	0.047	mg/Kg	1	6/22/2016 7:46:09 PM	25976
Xylenes, Total	ND	0.094	mg/Kg	1	6/22/2016 7:46:09 PM	25976
Surr: 4-Bromofluorobenzene	96.8	80-120	%Rec	1	6/22/2016 7:46:09 PM	25976

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 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#:

1606B27

29-Jun-16

Client:

APEX TITAN

Project:

Prep Date:

Trunk MD 16" Hydro

Sample ID MB-26042

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 26042

PQL

RunNo: 35149

Units: mg/Kg

Analyte

6/23/2016

Analysis Date: 6/23/2016

Result

SeqNo: 1087334

HighLimit

%RPD **RPDLimit**

%RPD

%RPD

%RPD

Qual

Chloride

ND 1.5

Sample ID LCS-26042

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: Prep Date:

LCSS

Batch ID: 26042

RunNo: 35149

90

Units: mg/Kg

Analyte

6/23/2016

6/24/2016

6/24/2016

Analysis Date: 6/23/2016

14

SPK value SPK Ref Val %REC

SPK value SPK Ref Val %REC LowLimit

SeqNo: 1087335

110

Chloride

PQL Result

15.00

93.6 0

LowLimit

HighLimit

RPDLimit

Qual

Sample ID MB-26073

SampType: MBLK

Analysis Date: 6/24/2016

1.5

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 26073

RunNo: 35186 SeqNo: 1088718

Units: mg/Kg

HighLimit

RPDLimit

Qual

Analyte Chloride

Prep Date:

Result **PQL** ND 1.5

Result

14

SampType: LCS

TestCode: EPA Method 300.0: Anions

Sample ID LCS-26073 Client ID: LCSS

Batch ID: 26073

RunNo: 35186

Units: mg/Kg

Prep Date: Analyte

Analysis Date: 6/24/2016

SeqNo: 1088719

SPK value SPK Ref Val %REC LowLimit

SPK value SPK Ref Val %REC LowLimit

HighLimit

RPDLimit

Page 5 of 9

Qual

Chloride

PQL 1.5

15.00

93.2

110

Qualifiers:

ND

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded

% Recovery outside of range due to dilution or matrix

- Not Detected at the Reporting Limit R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J
- P Sample pH Not In Range RL

Analyte detected below quantitation limits

Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

4.4

WO#: 1606B27

Page 6 of 9

29-Jun-16

Client:

APEX TITAN

Project:

Surr: DNOP

Trunk MD 16" Hydro

Sample ID MB-25944	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 25944	RunNo: 35116	
Prep Date: 6/20/2016	Analysis Date: 6/23/2016	SeqNo: 1086562	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Range Organics (DRO)	ND 10		
Surr: DNOP	8.8 10.00	88.1 70	130
Sample ID LCS-25944	SampType: LCS	TestCode: EPA Method	I 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 25944	RunNo: 35116	
Prep Date: 6/20/2016	Analysis Date: 6/23/2016	SeqNo: 1086657	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Range Organics (DRO)	38 10 50.00	0 75.2 62.6	124

87.1

70

130

5.000

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

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606B27

29-Jun-16

Client:

APEX TITAN

Project: Trunk	MD 16" Hyd	ro								
Sample ID MB-25976	SampT	ype: MI	BĽK	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	je	
Client ID: PBS	Batch	ID: 25	976	F	RunNo: 3	5097				
Prep Date: 6/21/2016	Analysis D	ate: 6	/22/2016	5	SeqNo: 1	085943	Units: mg/h	Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	80	120			
Sample ID 1606B27-002All	SampT	ype: M	S	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID: FP-2	Batch	ID: 25	976	F	RunNo: 3	5097				
Prep Date: 6/21/2016	Analysis D	ate: 6	/22/2016	8	SeqNo: 1	085947	Units: mg/h	K g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.83	0	94.2	59.3	143			
Surr: BFB	1100		993.0		106	80	120			
Sample ID 1606B27-002AN	ISD SampT	ype: M	SD	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID: FP-2	Batch	ID: 25	976	F	RunNo: 35097					
Prep Date: 6/21/2016	Analysis D	ate: 6	/22/2016	8	SeqNo: 1	085948	Units: mg/k	K g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.56	0	99.9	59.3	143	0.589	20	
Surr: BFB	1100		942.5		118	80	120	0	0	
Sample ID LCS-25976	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID: LCSS	Batch	ID: 25	976	F	RunNo: 3	5174				
Prep Date: 6/21/2016	Analysis D	ate: 6	/25/2016	8	SeqNo: 1	088116	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	116	80	120			
Surr: BFB	1100		1000		107	80	120			
Sample ID LCS-26055	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID: LCSS	Batch	ID: 26	055	F	RunNo: 3	5174				
Prep Date: 6/24/2016	Analysis D	ate: 6	/25/2016	S	SeqNo: 1	088117	Units: %Re	С		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		107	80	120			
	CompT	ype: MI	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Sample ID MB-26055	Sampi									
Sample ID MB-26055 Client ID: PBS	,	ID: 26	055	R	RunNo: 3	5174				
	,				RunNo: 3: SeqNo: 1		Units: %Re	С		
Client ID: PBS	Batch		/25/2016		SeqNo: 1		Units: %Re	c %RPD	RPDLimit	Qual

Qualifiers:

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

RPD outside accepted recovery limits R

% 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 7 of 9

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#:

1606B27

29-Jun-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-25976	SampT	ype: ME	BLK	Tes	tCode: El	iles				
Client ID: PBS	Batch	Batch ID: 25976			RunNo: 3					
Prep Date: 6/21/2016	Analysis D	ate: 6/	22/2016	S	SeqNo: 1					
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	0.98		1.000		97.5	80	120			
Sample ID LCS-25976	SampT	ype: LC	S	TestCode: EPA Method 8021B: Volatiles						

Client ID: LCSS	Batch	1D: 25	976	R	RunNo: 3	5097				
Prep Date: 6/21/2016	Analysis D	ate: 6/	22/2016	S	SeqNo: 1	085954				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.7	75.3	123			
Toluene	0.98	0.050	1.000	0	97.7	80	124			
Ethylbenzene	0.99	0.050	1.000	0	99.4	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	98.2	83.9	122			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID 1606B27-001AMS	SampTyp	SampType: MS TestCode: EPA Method 8021B: Volatiles									
Client ID: FP-1	Batch II	D: 25 9	976	R							
Prep Date: 6/21/2016	Analysis Dat	e: 6/	22/2016	S	SeqNo: 1						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.96	0.023	0.9285	0	103	71.5	122				
Toluene	0.98	0.046	0.9285	0	106	71.2	123				
Ethylbenzene	0.99	0.046	0.9285	0	107	75.2	130				
Xylenes, Total	2.9	0.093	2.786	0.01671	103	72.4	131				
Surr: 4-Bromofluorobenzene	0.94		0.9285		101	80	120				

Sample ID 1606B27-001AN	ISD SampTy	ype: MS	SD	TestCode: EPA Method 8021B: Volatiles						
Client ID: FP-1	RunNo: 35097									
Prep Date: 6/21/2016	Analysis Da	ate: 6/	22/2016	S	SeqNo: 1	085957	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.024	0.9785	0	97.1	71.5	122	0.686	20	
Toluene	1.0	0.049	0.9785	0	102	71.2	123	1.71	20	
Ethylbenzene	1.0	0.049	0.9785	0	105	75.2	130	3.94	20	
Xylenes, Total	3.0	0.098	2.935	0.01671	103	72.4	131	5.38	20	
Surr: 4-Bromofluorobenzene	0.98		0.9785		100	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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 8 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#:

1606B27

29-Jun-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID LCS-26055

SampType: LCS

TestCode: EPA Method 8021B: Volatiles

80

Client ID: LCSS

Prep Date:

Batch ID: 26055

PQL

RunNo: 35174

6/24/2016

Analysis Date: 6/25/2016

SeqNo: 1088135

Units: %Rec

RPDLimit

Qual

Analyte Surr: 4-Bromofluorobenzene Result 0.99 SPK value SPK Ref Val %REC

1.000

LowLimit

HighLimit

120

Sample ID MB-26055

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

%RPD

%RPD

Client ID:

Analyte

Batch ID: 26055

RunNo: 35174

98.6

Analysis Date: 6/25/2016

SeqNo: 1088136

Units: %Rec

SPK value SPK Ref Val %REC

LowLimit **HighLimit** **RPDLimit** Qual

Surr: 4-Bromofluorobenzene

Prep Date: 6/24/2016

0.94

1.000

94.4

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

RPD outside accepted recovery limits

% 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

Sample container temperature is out of limit as specified



rian Environmenta Anatysis Euroratory 4901 Hawkins NE

Albuquerque, NM 87109 TEL: 505-345-3973 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: APEX AZ	TEC	Work O	rder Numbe	r: 1606	327			RcptNo	1
Received by/date:		040	211	4					
Logged By: Ashley G	allegos	6/21/2016	8:00:00 AN	4		A g		,	
Completed By: Ashley G	allegos	6/21/2016	10:13:59 A	M		A de			
Reviewed By: W	Z	61211	16			0			
Chain of Custody									
1. Custody seals intact on	sample bottles?			Yes		No		lot Present	
2. Is Chain of Custody con	nplete?			Yes	*	No	1	lct Present	
3. How was the sample de	livered?			Cour	ier				
Log In									
4. Was an attempt made	o cool the sample	987		Yes	V	No		NA .	
5. Were all samples receive	ed at a temperate	ure of >0°C t	o 6.0°C	Yes	V	No [NA 🗔	
6. Sample(s) in proper co	ntainer(s)?			Yes	V	No			
7. Sufficient sample volum	e for indicated tes	st(s)?		Yes	V	No			
8. Are samples (except VC	A and ONG) prop	perly preserve	d?	Yes	V	No			
9. Was preservative added	to bottles?			Yes		No	V	NA	
10.VOA vials have zero he	adspace?			Yes		No	No	VOA Vials	
11 Were any sample conta	iners received br	oken?		Yes		No			
							bo	of preserved ttles checked	
12. Does paperwork match (Note discrepancies on				Yes	V	No	for	pH: (<2	or >12 unless noted)
13. Are matrices correctly in	•	of Custody?		Yes	V	No [Adjusted?	,
14. Is it clear what analyses				Yes	-	No			
15. Were all holding times a (if no, notify customer for				Yes	V	No !		Checked by.	
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
Special Handling (if a	oplicable)								
16. Was client notified of all	discrepancies wi	th this order?		Yes		No		NA 🗸	
Person Notified:			Date						
By Whom:			Via:	eMa	iil 📋	Phone	Fax 📋 I	n Person	
Regarding:									
Client Instructions								- 10	
17. Additional remarks:									
18. Cooler Information									
Cooler No Temp		Seal Intact	Seal No	Seal D	ate	Signed B	у		
1 4.8	Good	Yes					1		

																		CHAIN OF C	USTODY RECORD
Proje Samp	PEX e Location ect Manager's Name	nA gerK	Su	m	0	Address: _ Contact: _ Phone: _ PO/SO #:	Address: Albuqueque; MM Contact: A.Freeman Phone: PO/SO #: ampler's Signature No/Type of Containers					ANALY: REQUE	STE	//			Lab use only Due Date: Temp. of coolers when received (C*): 4 8 1 2 3 4 5 Page 1 of 15		
Proj. 1	No.	,		ct Na		16" Hydro			No/Typ	oe of C	ontain	ers		B	4			/ /	
Matrix	Date	Time	CoEp	Grab		rks of Sample(s)	_	End	VOA	A/G	250 ml	Glass	P/O	ن 🔗 ا	100	1/		Lab Sa	mple !D (Lab Use Only)
5	6/20/16	1050			FP)-						-		XX	X			iloble	B27 001
5		1100				7-2						1		XX	X	_			-000
S		illo				-3						1		XX		i			-003
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-	and Maria	NO Marie			FO/ Buch	FRE Push	1000	Duch					L						
Beling	quished by (hill	,	e	Date: 20/16 16	Time: Receive		(Signa		($\chi \parallel$	Date	110	Time:	2	OTES:	P. 11 L. 3		
							,				\perp						D111 10 16	m Long Er	KOD
Relino	quished by (Signature)			Date:	Time: Recei	ved by:	(Signa	ature)			Date	:	Time:					
Relino	quished by (Signature)		1	Date:	Time: Recei	ved by:	(Signa	iture)			Date):	Time:					
Matrix Contai		V - Wastewa A - 40 ml vis			W - Water S A/G - Amber / O	S - Soil SD - So		L - Liquio	d A- Glass w	- Air Ba	ag outh			rcoal tube		- sludge	O - Oil		



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

July 06, 2016

Kyle Summers

APEX TITAN

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Trunk MD 16" Hydro

OrderNo.: 1606D44

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 6/24/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Trunk MD 16" Hydro

Lab ID: 1606D44-001

Project:

Client Sample ID: RP-1

Collection Date: 6/23/2016 9:50:00 AM

Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: LGT
Chloride	1.5	1.5	mg/Kg	1	6/28/2016 12:54:41 AM	26092
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analys	: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	6/27/2016 8:51:37 PM	25992
Surr: DNOP	94.7	70-130	%Rec	1	6/27/2016 8:51:37 PM	25992
EPA METHOD 8015D: GASOLINE RA	ANGE				Analys	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/27/2016 6:33:33 PM	26054
Surr: BFB	99.1	80-120	%Rec	1	6/27/2016 6:33:33 PM	26054
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.023	mg/Kg	1	6/27/2016 6:33:33 PM	26054
Toluene	ND	0.047	mg/Kg	1	6/27/2016 6:33:33 PM	26054
Ethylbenzene	ND	0.047	mg/Kg	1	6/27/2016 6:33:33 PM	26054
Xylenes, Total	ND	0.093	mg/Kg	1	6/27/2016 6:33:33 PM	26054
Surr: 4-Bromofluorobenzene	94.2	80-120	%Rec	1	6/27/2016 6:33:33 PM	26054

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606D44

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: RP-2

Project: Trunk MD 16" Hydro

Collection Date: 6/23/2016 10:00:00 AM

Lab ID: 1606D44-002

Matrix: SOIL

Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Α	nalyst: LGT
Chloride	ND	1.5	mg/Kg	1 6/28/2016 1:19:3	1 AM 26092
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS			A	nalyst: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1 6/27/2016 9:13:3	1 PM 25992
Surr: DNOP	98.3	70-130	%Rec	1 6/27/2016 9:13:3	1 PM 25992
EPA METHOD 8015D: GASOLINE RAN	GE			A	nalyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1 6/27/2016 6:57:0	4 PM 26054
Surr: BFB	96.2	80-120	%Rec	1 6/27/2016 6:57:0	4 PM 26054
EPA METHOD 8021B: VOLATILES				A	nalyst: NSB
Benzene	ND	0.023	mg/Kg	1 6/27/2016 6:57:0	4 PM 26054
Toluene	ND	0.047	mg/Kg	1 6/27/2016 6:57:0	4 PM 26054
Ethylbenzene	ND	0.047	mg/Kg	1 6/27/2016 6:57:0	4 PM 26054
Xylenes, Total	ND	0.094	mg/Kg	1 6/27/2016 6:57:0	4 PM 26054
Surr: 4-Bromofluorobenzene	91.6	80-120	%Rec	1 6/27/2016 6:57:0	4 PM 26054

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606D44

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: RP-3

Project:

Trunk MD 16" Hydro

Collection Date: 6/23/2016 10:10:00 AM

Lab ID:

1606D44-003

Matrix: SOIL Received Da

Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	6/29/2016 10:50:34 AM	26161
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	;			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	6/27/2016 9:35:16 PM	25992
Surr: DNOP	97.0	70-130	%Rec	1	6/27/2016 9:35:16 PM	25992
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/27/2016 7:20:31 PM	26054
Surr: BFB	97.9	80-120	%Rec	1	6/27/2016 7:20:31 PM	26054
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	6/27/2016 7:20:31 PM	26054
Toluene	ND	0.047	mg/Kg	1	6/27/2016 7:20:31 PM	26054
Ethylbenzene	ND	0.047	mg/Kg	1	6/27/2016 7:20:31 PM	26054
Xylenes, Total	ND	0.093	mg/Kg	1	6/27/2016 7:20:31 PM	26054
Surr: 4-Bromofluorobenzene	92.7	80-120	%Rec	1	6/27/2016 7:20:31 PM	26054

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606D44

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Trunk MD 16" Hydro

Project: Lab ID:

1606D44-004

Client Sample ID: RP-4

Collection Date: 6/23/2016 10:20:00 AM

Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	ND	30	mg/Kg	20	6/29/2016 11:52:37 Al	M 26161
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analys	st: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/27/2016 9:57:18 PM	25992
Surr: DNOP	97.4	70-130	%Rec	1	6/27/2016 9:57:18 PM	25992
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/27/2016 7:43:59 PM	26054
Surr: BFB	97.2	80-120	%Rec	1	6/27/2016 7:43:59 PM	26054
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	6/27/2016 7:43:59 PM	26054
Toluene	ND	0.047	mg/Kg	1	6/27/2016 7:43:59 PM	26054
Ethylbenzene	ND	0.047	mg/Kg	1	6/27/2016 7:43:59 PM	26054
Xylenes, Total	ND	0.095	mg/Kg	1	6/27/2016 7:43:59 PM	26054
Surr: 4-Bromofluorobenzene	92.0	80-120	%Rec	1	6/27/2016 7:43:59 PM	26054

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
- RPD outside accepted recovery limits
- % 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 13 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1606D44

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Trunk MD 16" Hydro

Lab ID:

1606D44-005

Client Sample ID: RP-5

Collection Date: 6/23/2016 10:30:00 AM

Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	6/29/2016 12:05:01 PM	26161
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	6/27/2016 10:19:06 PM	1 25992
Surr: DNOP	95.6	70-130	%Rec	1	6/27/2016 10:19:06 PM	1 25992
EPA METHOD 8015D: GASOLINE RA	ANGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/27/2016 8:07:26 PM	26054
Surr: BFB	98.5	80-120	%Rec	1	6/27/2016 8:07:26 PM	26054
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	6/27/2016 8:07:26 PM	26054
Toluene	ND	0.049	mg/Kg	1	6/27/2016 8:07:26 PM	26054
Ethylbenzene	ND	0.049	mg/Kg	1	6/27/2016 8:07:26 PM	26054
Xylenes, Total	ND	0.097	mg/Kg	1	6/27/2016 8:07:26 PM	26054
Surr: 4-Bromofluorobenzene	93.7	80-120	%Rec	1	6/27/2016 8:07:26 PM	26054

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
- RPD outside accepted recovery limits
- % 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 13
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1606D44

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: RP-6

Project:

Trunk MD 16" Hydro

Collection Date: 6/23/2016 10:40:00 AM

Lab ID:

1606D44-006

Matrix: SOIL

Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	6/29/2016 12:17:25 PM	26161
EPA METHOD 8015M/D: DIESEL RAM	NGE ORGANICS	3			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	6/27/2016 10:41:03 PM	25992
Surr: DNOP	96.2	70-130	%Rec	1	6/27/2016 10:41:03 PM	25992
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/27/2016 8:30:50 PM	26054
Surr: BFB	98.0	80-120	%Rec	1	6/27/2016 8:30:50 PM	26054
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	6/27/2016 8:30:50 PM	26054
Toluene	ND	0.047	mg/Kg	1	6/27/2016 8:30:50 PM	26054
Ethylbenzene	ND	0.047	mg/Kg	1	6/27/2016 8:30:50 PM	26054
Xylenes, Total	ND	0.094	mg/Kg	1	6/27/2016 8:30:50 PM	26054
Surr: 4-Bromofluorobenzene	92.1	80-120	%Rec	1	6/27/2016 8:30:50 PM	26054

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606D44

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Trunk MD 16" Hydro

Lab ID: 1606

1606D44-007

Client Sample ID: RP-7

Collection Date: 6/23/2016 10:50:00 AM

Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	6/29/2016 12:29:50 PM	26161
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS	,			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	6/27/2016 11:02:50 PM	25992
Surr: DNOP	95.9	70-130	%Rec	1	6/27/2016 11:02:50 PM	25992
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	6/27/2016 8:54:23 PM	26054
Surr: BFB	98.3	80-120	%Rec	1	6/27/2016 8:54:23 PM	26054
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	6/27/2016 8:54:23 PM	26054
Toluene	ND	0.046	mg/Kg	1	6/27/2016 8:54:23 PM	26054
Ethylbenzene	ND	0.046	mg/Kg	1	6/27/2016 8:54:23 PM	26054
Xylenes, Total	ND	0.092	mg/Kg	1	6/27/2016 8:54:23 PM	26054
Surr: 4-Bromofluorobenzene	92.6	80-120	%Rec	1	6/27/2016 8:54:23 PM	26054

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606D44

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: RP-8

Project: Trunk MD 16" Hydro

Collection Date: 6/23/2016 11:30:00 AM

Lab ID: 1606D44-008

Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	6/29/2016 12:42:15 PM	26161
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/27/2016 2:20:27 PM	26058
Surr: DNOP	77.9	70-130	%Rec	1	6/27/2016 2:20:27 PM	26058
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/27/2016 9:17:52 PM	26054
Surr: BFB	97.9	80-120	%Rec	1	6/27/2016 9:17:52 PM	26054
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	6/27/2016 9:17:52 PM	26054
Toluene	ND	0.049	mg/Kg	1	6/27/2016 9:17:52 PM	26054
Ethylbenzene	ND	0.049	mg/Kg	1	6/27/2016 9:17:52 PM	26054
Xylenes, Total	ND	0.098	mg/Kg	1	6/27/2016 9:17:52 PM	26054
Surr: 4-Bromofluorobenzene	93.5	80-120	%Rec	1	6/27/2016 9:17:52 PM	26054

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 8 of 13
- 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#: 1606D44

06-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26092

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: **PBS**

Prep Date:

6/27/2016

Batch ID: 26092 Analysis Date: 6/27/2016 RunNo: 35241

TestCode: EPA Method 300.0: Anions

Units: mg/Kg

RPDLimit

Qual

Analyte Chloride

Result **PQL** 1.5

SPK value SPK Ref Val %REC LowLimit

SeqNo: 1089804

HighLimit

%RPD

Client ID:

ND

Sample ID LCS-26092 LCSS

SampType: LCS

RunNo: 35241

90

Units: mg/Kg

110

Analyte

Prep Date: 6/27/2016

Batch ID: 26092 Analysis Date: 6/27/2016

SeqNo: 1089805

%RPD

Qual

Chloride

Result **PQL**

14

Result

Result

14

SPK value SPK Ref Val

15.00

15.00

%REC 94.7

LowLimit

HighLimit

RPDLimit

Sample ID MB-26161

SampType: MBLK

Batch ID: 26161

PQL

1.5

TestCode: EPA Method 300.0: Anions RunNo: 35326

Units: mg/Kg

Client ID:

Prep Date:

Client ID:

Prep Date: 6/30/2016

Sample ID LCS-26161

LCSS

6/30/2016

PBS

Analysis Date: 6/29/2016

SeqNo: 1092908

SPK value SPK Ref Val %REC LowLimit HighLimit

%RPD **RPDLimit**

Qual

Analyte Chloride

1.5

TestCode: EPA Method 300.0: Anions

SampType: LCS

Batch ID: 26161

RunNo: 35326

Units: mg/Kg

%RPD

RPDLimit Qual

Analyte Chloride

Analysis Date: 6/29/2016 **PQL**

1.5

SeqNo: 1092909 SPK value SPK Ref Val

%REC LowLimit 95.1

90

HighLimit 110

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

RPD outside accepted recovery limits

В

J

Analyte detected in the associated Method Blank Value above quantitation range Analyte detected below quantitation limits

Page 9 of 13

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Qualifiers:

% Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606D44 06-Jul-16

Client:

APEX TITAN

al MD 16" Und

Project:	Trunk MI	D 16" Hydr	0								
Sample ID	LCS-26058	SampTy	pe: LC	cs	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: 26	058	F	RunNo: 3	5221				
Prep Date:	6/24/2016	Analysis Da	te: 6	/27/2016	5	SeqNo: 1	089122	Units: mg/l	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	50	10	50.00	0	99.4	62.6	124			
Surr: DNOP		4.7		5.000		94.7	70	130			
Sample ID	MB-26058	SampTy	pe: MI	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: 26	058	F	RunNo: 3	5221				
Prep Date:	6/24/2016	Analysis Da	te: 6	/27/2016	5	SeqNo: 1	089123	Units: mg/l	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	ND	10			The state of the s		er Naviratio			
Surr: DNOP		9.6		10.00		95.6	70	130			
Sample ID	MB-25992	SampTy	pe: MI	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: 25	992	F	RunNo: 3	5221				
Prep Date:	6/22/2016	Analysis Da	te: 6	/27/2016	8	SeqNo: 1	089257	Units: mg/l	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	ND	10								
Surr: DNOP		8.9		10.00		88.6	70	130			
Sample ID	LCS-25992	SampTy	pe: LC	cs	Tes	Code: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	D: 25	992	F	tunNo: 3	5221				
Prep Date:	6/22/2016	Analysis Da	te: 6	/27/2016	8	SeqNo: 1	089274	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
7	Organics (DRO)	52	10	50.00	0	103	62.6	124			
Surr: DNOP		4.8		5.000		96.6	70	130			
Sample ID	1606D44-008AMS	SampTy	pe: MS	S	Tes	Code: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	RP-8	Batch	D: 26	058	F	tunNo: 3	5220				
Prep Date:	6/24/2016	Analysis Da	te: 6/	/27/2016	S	eqNo: 1	089551	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
_	Organics (DRO)	35	9.5	47.53	0	74.5	33.9	141			
Surr: DNOP		3.7		4.753		77.1	70	130			
Sample ID	1606D44-008AMS	D SampTy	pe: MS	SD	Tes	Code: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	RP-8	Batch	D: 26	058	F	tunNo: 3	5220				
Prep Date:	6/24/2016	Analysis Da	te: 6/	27/2016	S	eqNo: 1	090134	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

RPD outside accepted recovery limits

% 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 10 of 13

P Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606D44

06-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID 1606D44-008AMSD

SampType: MSD

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

Client ID: RP-8

Batch ID: 26058

RunNo: 35220

Prep Date: 6/24/2016

Analysis Date: 6/27/2016

SeqNo: 1090134

Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	9.5	47.26	0	75.4	33.9	141	0.651	20	
Surr: DNOP	3.8		4.726		80.5	70	130	0	0	

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits
- % 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

Page 11 of 13

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

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606D44

06-Jul-16

Client:

APEX TITAN

Project:

Surr: BFB

Trunk MD 16" Hydro

Sample ID MB-26054

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS**

Batch ID: 26054

PQL

5.0

RunNo: 35243

%RPD

Prep Date: 6/24/2016

Analysis Date: 6/27/2016

SeqNo: 1089910

Units: mg/Kg

HighLimit

Analyte Gasoline Range Organics (GRO) Result ND 980

1000

SPK value SPK Ref Val %REC

97.6

120

RPDLimit Qual

Sample ID LCS-26054

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

LowLimit

LowLimit

Client ID:

LCSS

Batch ID: 26054

RunNo: 35243

Prep Date: 6/24/2016

Analysis Date: 6/27/2016 SeqNo: 1089911

SPK value SPK Ref Val

Units: mg/Kg

Analyte Gasoline Range Organics (GRO) Result PQL 27 1100

25.00 1000 %REC 109 109

0

80 80 **RPDLimit** Qual

Page 12 of 13

Surr: BFB

5.0

120

HighLimit %RPD 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
- R RPD outside accepted recovery limits
- % 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 J
- 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#:

1606D44

06-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26054 SampType: MBLK			TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 26054			F	RunNo: 3					
Prep Date: 6/24/2016	Analysis Date: 6/27/2016			8	SeqNo: 1089938 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	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.3	80	120			

Sample ID LCS-26054	S	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	054	RunNo: 35243								
Prep Date: 6/24/2016	ate: 6/24/2016 Analysis Date: 6/27/2016				SeqNo: 1					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.2	75.3	123			
Toluene	0.99	0.050	1.000	0	99.5	80	124			
Ethylbenzene	1.0	0.050	1.000	0	102	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	99.7	83.9	122			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 13 of 13

- 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

Sample Log-In Check List

LABORATORY	Website: www.hal	llenviron	mental.co	792			
Client Name: APEX AZTEC	Work Order Number:	1606D	44			RcptN	o: 1
Received by/date: A OG/2 4//0	6			_	,		
Logged By: Anne Thome	6/24/2016 7:47:00 AM			anne A			
Completed By: Anne Thorne	6/24/2016			ame I			!
Reviewed By:	6/24/16						
Chain of Custody	4////						
1. Custody seals intact on sample bottles?		Yes		No [) i	Not Present]
2. Is Chain of Custody complete?		Yes	\checkmark	No []	Not Present]
3. How was the sample delivered?		Couri	er				
<u>Log In</u>							
4. Was an attempt made to cool the samples?		Yes	V	No []	NA [
5. Were all samples received at a temperature	of >0° C to 6.0°C	Yes	V	No []	NA 🗆	
6. Sample(s) in proper container(s)?		Yes	\checkmark	No [)		
7. Sufficient sample volume for indicated test(s)	?	Yes	\checkmark	No []		
8. Are samples (except VOA and ONG) properly	preserved?	Yes	\checkmark	No []		
9. Was preservative added to bottles?		Yes		No 🛂	3	NA []
10.VOA vials have zero headspace?		Yes		No [] No	VOA Vials]
11. Were any sample containers received broke	1?	Yes		No N		of preserved	
					bo	ttles checked	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes	\checkmark	No L	_ : for	r pH: (<	2 or >12 unless noted)
13. Are matrices correctly identified on Chain of	Custody?	Yes	✓	No []	Adjusted?	
14, is it clear what analyses were requested?		Yes	\checkmark	No []		
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes	V	No [] !	Checked by	:
Special Handling (if applicable)							
16. Was client notified of all discrepancies with the	nis order?	Yes		No []	NA 🗹	9
Person Notified:	Date					·- · · · · · · · · · · · · · · · · ·	_
By Whom:	Via:	eMa	il Ph	one F	ах 🗍	In Person	ļ
Regarding:			4				
Client Instructions:							
17. Additional remarks:							
18. Cooler Information							
Cooler No Temp °C Condition Se		Seal Da	te S	Signed By	\dashv		
1 2.4 Good Yes					1		

										CHAIN OF CUSTODY RECORD
Office	PEX e Locatio	n Aztec		Address: Contact: Phone:	Hall & ABQ	NM	and the second second	ANALYSIS REQUESTE	OND TORO	Lab use only Due Date: 2. Temp. of coolers when received (C"): 2. 2. 3. 4. 5. Page of
	ect Manaç er's Name	ger K.Su	immers	PO/SO #: Sampler's Signa	ature		4	Sols Brek	# 3 / /	111
		eechilly s		A./.	FL	7	1	18	7 \$ / / /	1 / /
Proj N	to.		ect Name	William .		No/Ty	pe of Containers	802	Colorents	
			Trunk MO					- / 7	1111	
Matrx	Date	Time m	I loentifying Mar	rks of Sample(s)	Start Depth End Depth	VOA	AvG 1LL 250 250 3less Jar	1//		Lab Sample ID (Lab Use Only)
5	6/23/16	950	RP-	- 1			1	XXX		1606844-001
5	1	1000	RP.	-2			1	XXX		-42
5		1010	RP	-3				XXX		
5		1020	RP	-4				XXX		TCY
5		1030	RE	-5			١	XXX		715
5		1040	RP	٠. ل			1	XXX		706
5		1050	RI	2-7			1	XXX		747
5	. 4	1130	Re	-8			1	XXX		713
			A	H5						
Turn a	round time	Normal			100% Rush	1				
Balino	quished by	(Signature)	Date: 0/23 1/2 14	Time: Repen	red by: (Sight	ature	Date: 6/23/18		NOTES:	
Reling	uished by	(Signature)	Date: 18	Time: Recon	red/by: (Sign	ature	Date:	6747	Bill to	Tom Long EPROD
Relino	quished by	(Signature)	date:	Time: Recei	ved by. (Sign	ature)	Date:	Time:		
Relino	quished by	(Signature)	Date:	Time: Recei	ed by: (Sign	ature)	Date:	Time:		
Matrix Contai		W - Wastewater 0A - 40 ml visi	W - Water A/G - Amber / 0	S - Soil SD - So or Glass 1 Liter		id A		narcoal tube S	L - sludge O - Oil	



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

July 14, 2016

Kyle Summers

APEX TITAN

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Trunk MD 16" Hydro

OrderNo.: 1607041

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/30/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1607041

Date Reported: 7/14/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: WP-6

Project: Trunk MD 16" Hydro

Collection Date: 6/29/2016 7:50:00 AM

Lab ID: 1607041-001

Received Date: 6/30/2016 8:05:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	7/8/2016 5:56:39 PM	26308
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	;			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/6/2016 1:06:57 PM	26224
Surr: DNOP	94.6	70-130	%Rec	1	7/6/2016 1:06:57 PM	26224
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/5/2016 1:20:58 PM	26197
Surr: BFB	97.8	80-120	%Rec	1	7/5/2016 1:20:58 PM	26197
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	7/5/2016 1:20:58 PM	26197
Toluene	ND	0.048	mg/Kg	1	7/5/2016 1:20:58 PM	26197
Ethylbenzene	ND	0.048	mg/Kg	1	7/5/2016 1:20:58 PM	26197
Xylenes, Total	ND	0.096	mg/Kg	1	7/5/2016 1:20:58 PM	26197
Surr: 4-Bromofluorobenzene	95.0	80-120	%Rec	1	7/5/2016 1:20:58 PM	26197

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 5
- 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#:

1607041

14-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26308

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 26308

PQL

RunNo: 35546

Prep Date: 7/8/2016

SeqNo: 1100588

Units: mg/Kg

Analyte

Analysis Date: 7/8/2016

SPK value SPK Ref Val %REC LowLimit

HighLimit

RPDLimit Qual

Page 2 of 5

Chloride

ND 1.5

Sample ID LCS-26308

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID:

LCSS

Batch ID: 26308

RunNo: 35546

Prep Date: 7/8/2016

1.5

SeqNo: 1100589

Units: mg/Kg HighLimit

%RPD

%RPD

RPDLimit Qual

Analysis Date: 7/8/2016

SPK value SPK Ref Val %REC

Analyte

Result

15.00

94.1

110

Chloride

- 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
- R RPD outside accepted recovery limits
- % 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
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607041

14-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Troject.	iD to Tiyulo									
Sample ID MB-26224	SampType:	MBLK	Test	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID:	26224	Ru	RunNo: 35437						
Prep Date: 7/5/2016	Analysis Date:	7/6/2016	Se	eqNo: 10	096560	Units: mg/h	(g			
Analyte	Result PC	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Range Organics (DRO)	ND	10								
Surr: DNOP	9.5	10.00		94.6	70	130				
Sample ID LCS-26224	SampType:	LCS	Test	Code: EF	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID: LCSS	Batch ID:	26224	Ru	unNo: 3	5437					
Prep Date: 7/5/2016	Analysis Date:	7/6/2016	Se	eqNo: 10	096561	Units: mg/k	(g			
Analyte	Result PC	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	37	10 50.00	0	74.7	62.6	124				
Surr: DNOP	4.1	5.000		82.6	70	130				

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
- RPD outside accepted recovery limits R
- S % 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
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 3 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#: 1607041

14-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26197

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

PBS

Batch ID: 26197

PQL

5.0

RunNo: 35429

LowLimit

120

%RPD

%RPD

Prep Date: 7/1/2016

Analysis Date: 7/5/2016

SeqNo: 1096243

Units: mg/Kg

HighLimit

RPDLimit Qual

Qual

Analyte Gasoline Range Organics (GRO) Result ND 960

1000

SPK value SPK Ref Val %REC

95.8

80

RPDLimit

Surr: BFB Sample ID LCS-26197

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Client ID: **LCSS**

Batch ID: 26197

RunNo: 35429

Prep Date: 7/1/2016 Analysis Date: 7/5/2016 SeqNo: 1096244

Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC HighLimit Analyte LowLimit Gasoline Range Organics (GRO) 26 5.0 25.00 0 105 80 120 Surr: BFB 1000 107 80 1100 120

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E
- 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

Value above quantitation range

Page 4 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607041

14-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26197	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						•
Client ID: PBS	Batch ID: 26197			R	RunNo: 35429					
Prep Date: 7/1/2016	Analysis Date: 7/5/2016			S	SeqNo: 1096264			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	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.6	80	120			

Sample ID LCS-26197 SampType: LCS			S	TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Client ID: LCSS Batch ID: 26197			R	RunNo: 35429						
Prep Date: 7/1/2016 Analysis Date: 7/5/2016		5/2016	S	SeqNo: 1096265 Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.92	0.025	1.000	0	91.8	75.3	123				
Toluene	0.93	0.050	1.000	0	92.7	80	124				
Ethylbenzene	0.96	0.050	1.000	0	96.3	82.8	121				
Xylenes, Total	2.8	0.10	3.000	0	94.4	83.9	122				
Surr: 4-Bromofluorobenzene	1.0		1.000		103	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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 5 of 5

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



Hall E onmental 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: APEX AZTEC Work Order Number: 1607041 RcptNo: 1 de 30/11 Received by/date: 6/30/2016 8:05:00 AM Logged By: **Lindsay Mangin** Completed By: **Lindsay Mangin** 7/1/2016 12:36:12 PM 1/16 Reviewed By: Chain of Custody Yes | No 🗌 Not Present 1 Custody seals intact on sample bottles? No 🗌 Not Present Yes V 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In Yes 🗸 No 🗌 NA 🗌 4. Was an attempt made to cool the samples? 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗌 NA 🗌 Yes V No 🗌 Yes V Sample(s) in proper container(s)? Yes V No 🗌 7. Sufficient sample volume for indicated test(s)? No 🗌 8. Are samples (except VOA and ONG) properly preserved? Yes No 🗸 NA 🗌 9. Was preservative added to bottles? No 🗌 No VOA Vials Yes 10. VOA vials have zero headspace? Yes 🗌 No V 11. Were any sample containers received broken? # of preserved bottles checked No 🗌 for pH: Yes 🗸 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗆 Yes V 13. Are matrices correctly identified on Chain of Custody? 14 is it clear what analyses were requested? Yes V No 🗆 Checked by: Yes 🗸 No 🔲 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (If applicable) 16. Was client notified of all discrepancies with this order? Yes No 🗆 NA 🗹 **Person Notified:** By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Good

			CHAIN OF CUSTODY RECORD
APEX Office LocationAztec_NM Project ManagerKSummous Sampler's Name Rance Deechilly Sampler Name	Laboratory: Hall Address: Albuque Contact: A. Free Phone: PO/SO#: Sampler's Signature	que NM	ANALYSIS REQUESTED Temp. of coolers when received (C*): // 1 2 3 4 5 Page 1 of 1
Trunk MO !	6" H40	\(\delta \& \delta \end{array} \) \(\delta	
CG	rks of Sample(s)	AAG 11LL 250 ml dar Jar PyO	Lab Sample ID (Lab Use Only)
S 6/29/16 0750 WP-	60		1407041 -001
	··P·		
	WES .		
	350% Rush □ 100% Rush		
Anx 21 will 12/29/16 12	Time: Received by: (Signa		Time: NOTES:
Relinquished by (Signature) Date:	Time: Received by: (Signa	ture) Date:	Time: Bill to Tom Lung EPPOD
Refinquished by (Signature)	Time: Received by: (Signa	ture) Date:	Time:
Relinquished by (Signature) Date:	Time: Received by: (Signa	ture) Date:	Time:
Matrix WW - Wastewater W - Water S Container VOA - 40 ml vial A/G - Amber / O	S - Soil SD - Solid L - Liquid	d A - Air Bag C - Cha Glass wide mouth P/O - P	arcoal tube SL - sludge O - Oil Plastic or other



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

July 06, 2016.

Kyle Summers
APEX TITAN
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (903) 821-5603

FAX

RE: Trunk MD 16" Hydro

OrderNo.: 1606F25

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/28/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Bules

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1606F25

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: WP-1

Project: Trunk MD 16" Hydro

Collection Date: 6/27/2016 11:40:00 AM

Lab ID: 1606F25-001

Matrix: SOIL

Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: LGT
Chloride	ND	30	mg/Kg	20	7/1/2016 2:41:18 PM	26203
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analys	: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/30/2016 10:20:04 AM	26153
Surr: DNOP	90.5	70-130	%Rec	1	6/30/2016 10:20:04 AM	26153
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/29/2016 9:07:51 PM	26117
Surr: BFB	98.1	80-120	%Rec	1	6/29/2016 9:07:51 PM	26117
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	6/29/2016 9:07:51 PM	26117
Toluene	ND	0.049	mg/Kg	1	6/29/2016 9:07:51 PM	26117
Ethylbenzene	ND	0.049	mg/Kg	1	6/29/2016 9:07:51 PM	26117
Xylenes, Total	ND	0.097	mg/Kg	1	6/29/2016 9:07:51 PM	26117
Surr: 4-Bromofluorobenzene	91.9	80-120	%Rec	1	6/29/2016 9:07:51 PM	26117

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits 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 1606F25

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: WP-2

Project: Trunk MD 16" Hydro

Collection Date: 6/27/2016 11:50:00 AM

Lab ID: 1606F25-002

Matrix: SOIL

Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	7/1/2016 3:18:32 PM	26203
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	6/30/2016 11:49:23 AM	A 26153
Surr: DNOP	90.3	70-130	%Rec	1	6/30/2016 11:49:23 AM	A 26153
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/29/2016 9:31:24 PM	26117
Surr: BFB	98.7	80-120	%Rec	1	6/29/2016 9:31:24 PM	26117
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	6/29/2016 9:31:24 PM	26117
Toluene	ND	0.049	mg/Kg	1	6/29/2016 9:31:24 PM	26117
Ethylbenzene	ND	0.049	mg/Kg	1	6/29/2016 9:31:24 PM	26117
Xylenes, Total	ND	0.097	mg/Kg	1	6/29/2016 9:31:24 PM	26117
Surr: 4-Bromofluorobenzene	93.7	80-120	%Rec	1	6/29/2016 9:31:24 PM	26117

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

Lab Order 1606F25

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: WP-3

Project:

Trunk MD 16" Hydro

Collection Date: 6/27/2016 12:00:00 PM

Lab ID: 1606F25-003

Matrix: SOIL

Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	ND	30	mg/Kg	20	7/1/2016 3:30:57 PM	26203
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	•			Analys	st: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/30/2016 12:11:14 P	M 26153
Surr: DNOP	97.6	70-130	%Rec	1	6/30/2016 12:11:14 P	M 26153
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	6/29/2016 9:54:56 PM	26117
Surr: BFB	99.0	80-120	%Rec	1	6/29/2016 9:54:56 PM	26117
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.025	mg/Kg	1	6/29/2016 9:54:56 PM	26117
Toluene	ND	0.050	mg/Kg	1	6/29/2016 9:54:56 PM	26117
Ethylbenzene	ND	0.050	mg/Kg	1	6/29/2016 9:54:56 PM	26117
Xylenes, Total	ND	0.10	mg/Kg	1	6/29/2016 9:54:56 PM	26117
Surr: 4-Bromofluorobenzene	95.3	80-120	%Rec	1	6/29/2016 9:54:56 PM	26117

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606F25

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: WP-4

Project:

Trunk MD 16" Hydro

Collection Date: 6/27/2016 12:10:00 PM

Lab ID:

1606F25-004

Matrix: SOIL

Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	ND	30	mg/Kg	20	7/1/2016 3:43:21 PM	26203
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analys	st: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/30/2016 12:33:00 P	M 26153
Surr: DNOP	90.3	70-130	%Rec	1	6/30/2016 12:33:00 P	M 26153
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/29/2016 10:18:25 P	M 26117
Surr: BFB	101	80-120	%Rec	1	6/29/2016 10:18:25 P	M 26117
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.025	mg/Kg	1	6/29/2016 10:18:25 P	M 26117
Toluene	ND	0.049	mg/Kg	1	6/29/2016 10:18:25 P	M 26117
Ethylbenzene	ND	0.049	mg/Kg	1	6/29/2016 10:18:25 P	M 26117
Xylenes, Total	ND	0.098	mg/Kg	1	6/29/2016 10:18:25 P	M 26117
Surr: 4-Bromofluorobenzene	94.8	80-120	%Rec	1	6/29/2016 10:18:25 P	M 26117

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
- RPD outside accepted recovery limits
- % 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 4 of 9 J

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

Lab Order 1606F25

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: WP-5

Trunk MD 16" Hydro Project:

Collection Date: 6/27/2016 12:20:00 PM

Lab ID: 1606F25-005 Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	7/1/2016 3:55:46 PM	26203
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analys	t: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/30/2016 12:55:02 PI	M 26153
Surr: DNOP	88.2	70-130	%Rec	1	6/30/2016 12:55:02 PI	M 26153
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	6/29/2016 10:41:55 PI	M 26117
Surr: BFB	97.8	80-120	%Rec	1	6/29/2016 10:41:55 PI	M 26117
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.025	mg/Kg	1	6/29/2016 10:41:55 PI	M 26117
Toluene	ND	0.050	mg/Kg	1	6/29/2016 10:41:55 PI	M 26117
Ethylbenzene	ND	0.050	mg/Kg	1	6/29/2016 10:41:55 PI	M 26117
Xylenes, Total	ND	0.10	mg/Kg	1	6/29/2016 10:41:55 PI	M 26117
Surr: 4-Bromofluorobenzene	90.5	80-120	%Rec	1	6/29/2016 10:41:55 PI	M 26117

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
- RPD outside accepted recovery limits
- % 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 5 of 9
- 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#:

1606F25

06-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26203

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 26203

RunNo: 35411

Prep Date: 7/1/2016

Analysis Date: 7/1/2016

SeqNo: 1095690

Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit**

Chloride

ND 1.5

SampType: LCS Batch ID: 26203

RunNo: 35411

TestCode: EPA Method 300.0: Anions

Prep Date: 7/1/2016

Sample ID LCS-26203

LCSS

Analysis Date: 7/1/2016

SeqNo: 1095691

Units: mg/Kg

%RPD **RPDLimit** Qual

Analyte

SPK value SPK Ref Val %REC

Client ID:

1.5 15.00

94.8

110

Chloride

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

RPD outside accepted recovery limits

% 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 6 of 9

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#: 1606F25

Page 7 of 9

06-Jul-16

Client:

APEX TITAN

Project:	Trunk MI	1 AN D 16" Hydro	0								
Sample ID	LCS-26153	SampTy	pe: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	D: 26	153	F	RunNo: 3	5335				
Prep Date:	6/29/2016	Analysis Da	te: 6/	30/2016	8	SeqNo: 1	093643	Units: mg/l	K g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	51	10	50.00	0	103	62.6	124			
Surr: DNOP		4.6		5.000		91.0	70	130			
Sample ID	MB-26153	SampTy	pe: ME	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	D: 26	153	F	RunNo: 3	5335				
Prep Date:	6/29/2016	Analysis Da	te: 6/	30/2016	S	SeqNo: 1	093644	Units: mg/l	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	ND	10		*						
Surr: DNOP		8.6		10.00		86.4	70	130			
Sample ID	1606F25-001AMS	SampTy	ре: М\$	3	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	WP-1	Batch I	D: 26	153	F	RunNo: 3	5334				
Prep Date:	6/29/2016	Analysis Da	te: 6/	30/2016	S	SeqNo: 1	094441	Units: mg/l	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	43	9.6	48.03	2.386	84.6	33.9	141			
Surr: DNOP		4.2		4.803		86.6	70	130	*		
Sample ID	1606F25-001AMS) SampTy	pe: MS	SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	WP-1	Batch I	D: 26	153	F	RunNo: 3	5334				
Prep Date:	6/29/2016	Analysis Da	te: 6/	30/2016	S	SeqNo: 1	094442	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	46	10	50.56	2.386	87.0	33.9	141	7.55	20	
Surr: DNOP		4.6		5.056		91.5	70	130	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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606F25

06-Jul-16

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26117 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: **PBS** Batch ID: 26117 RunNo: 35307 Prep Date: 6/28/2016 Analysis Date: 6/29/2016 SeqNo: 1092208 Units: mg/Kg %RPD SPK value SPK Ref Val %REC LowLimit Analyte Result **PQL** HighLimit **RPDLimit** Qual Gasoline Range Organics (GRO) ND 5.0 990 Surr: BFB 1000 99.3 80 120

Sample ID LCS-26117 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 26117 RunNo: 35307 Units: mg/Kg Prep Date: 6/28/2016 Analysis Date: 6/29/2016 SeqNo: 1092209 %REC %RPD Result **PQL** SPK value SPK Ref Val LowLimit **HighLimit RPDLimit** Analyte Qual Gasoline Range Organics (GRO) 27 5.0 25.00 0 110 80 120 Surr: BFB 1100 1000 111 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
- RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 8 of 9

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606F25

06-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26117	Samp	Гуре: МЕ	BLK .	Tes	Code: E	PA Method	8021B: Volat	tiles		
Client ID: PBS	Batc	h ID: 26	117	R	RunNo: 3	5307				
Prep Date: 6/28/2016	Analysis [Date: 6/	29/2016	S	SeqNo: 1	092238	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025		11-						
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		95.0	80	120			
Sample ID LCS-26117	Samp	Гуре: LC	s	Test	Code: El	PA Method	8021B: Volat	tiles		
Sample ID LCS-26117 Client ID: LCSS		Type: LC			Code: El		8021B: Volat	tiles		
		h ID: 26	117	R		5307	8021B: Volat			
Client ID: LCSS	Batc	h ID: 26	117 29/2016	R	tunNo: 3	5307			RPDLimit	Qual
Client ID: LCSS Prep Date: 6/28/2016	Batc Analysis [h ID: 26	117 29/2016	R	tunNo: 3 SeqNo: 1	5307 092239	Units: mg/K	(g	RPDLimit	Qual
Client ID: LCSS Prep Date: 6/28/2016 Analyte	Batc Analysis I Result	h ID: 26 Date: 6 /	117 29/2016 SPK value	R S SPK Ref Val	cunNo: 3 seqNo: 1 %REC	5307 092239 LowLimit	Units: mg/K	(g	RPDLimit	Qual
Client ID: LCSS Prep Date: 6/28/2016 Analyte Benzene	Batc Analysis I Result	h ID: 26 Date: 6 PQL 0.025	117 29/2016 SPK value 1.000	SPK Ref Val	8unNo: 3 SeqNo: 1 %REC 95.9	5307 092239 LowLimit 75.3	Units: mg/K HighLimit 123	(g	RPDLimit	Qual
Client ID: LCSS Prep Date: 6/28/2016 Analyte Benzene Toluene	Analysis D Result 0.96 0.97	PQL 0.025 0.050	29/2016 SPK value 1.000 1.000	SPK Ref Val 0 0	8unNo: 3 8eqNo: 1 8REC 95.9 96.9	5307 092239 LowLimit 75.3 80	Units: mg/K HighLimit 123 124	(g	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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits

Page 9 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 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: APEX AZTEC Work Order Number: 1606F25 RcptNo: 1 Received by/date: 6/28/2016 8:00:00 AM Logged By: **Ashley Gallegos** Completed By: **Ashley Gallegos** 6/28/2016 11:51:34 AM Reviewed By: Chain of Custody Yes No . Not Present 1 Custody seals intact on sample bottles? Yes 🗸 No 🗌 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Client Log In Yes 🗸 No 🗌 NA 🗌 4. Was an attempt made to cool the samples? NA 🗌 No 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C Yes V Yes V No 🗌 Sample(s) in proper container(s)? Yes 🗸 No 🗌 7. Sufficient sample volume for indicated test(s)? No 🗌 8. Are samples (except VOA and ONG) properly preserved? No 🗸 Yes NA 🗌 9. Was preservative added to bottles? No VOA Vials Yes | No 🗌 10. VOA vials have zero headspace? Yes 🗌 No 🗸 11. Were any sample containers received broken? # of preserved bottles checked for pH: No 🗌 Yes V 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 Yes 🗸 13. Are matrices correctly identified on Chain of Custody? No 🗌 Yes 🗸 14. Is it clear what analyses were requested? No 🗌 Checked by: Yes 🗸 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes No 🗌 NA 🗹 16. Was client notified of all discrepancies with this order? **Person Notified:** Date By Whom: Via: eMail Phone Fax In Person Regarding: **Client Instructions:** 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No 1.8 Good

																					C	HAI	V OF	Cl	JSTODY RECORD	2
Offic Proje	Laboratory: Hall Environmental Address: Alargurgue, nm Contact: A.Freenen Phone: Poler's Name Cance Deschilly No. Project Name Laboratory: Hall Environmental Address: Alargurgue, nm Sompler's Signature No/Type of Containers							Anai	UES'	LED CO LORO								Due Date: Temp. of coolers when received (C°): 1 2 3 4 5								
Proj. N				Proje		ame	10" Hydr		-		pe of C	ontain	iers		ú		न पुर्व /	$^{\prime}$ $/$								
Matrix	Da	te	Time	CoEp	Grab		ks of Sample(s)		End	VOA	AG 11	250 ml	Glass Jar	P/O						//	//				ple ID (Lab Use Only)	
5	602	7/16	1140			WP.	-1						1		1	XX						14	OC	PI	F85-001	
S	1		1150			WP	- 2						1		2	XX									-002	
5			1200			WP	-3						1		X:	XX									-003	
\$			1210			WE	-4						1		X :	XX									-004	
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Matrix Contai		ww	V - Wastewa A - 40 mi via	ter		W - Water S A/G - Amber / O	S - Soil SD - So	lid !	L - Liqui	d A Glass v	- Air Ba	ag			rcoal tub		SL - sludge		0 - Oi	ı	_					



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

July 13, 2016

Kyle Summers APEX TITAN 606 S. Rio Grande Suite A Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: MD16 Hydro 5

OrderNo.: 1607083

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 7/2/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to 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

Lab Order 1607083

Date Reported: 7/13/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: DP-1

Project: MD16 Hydro 5

Collection Date: 7/1/2016 8:45:00 AM

Lab ID:

1607083-001

Matrix: SOIL

Received Date: 7/2/2016 10:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	7/11/2016 9:52:16 PM	26315
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/7/2016 2:21:40 PM	26260
Surr: DNOP	85.4	70-130	%Rec	1	7/7/2016 2:21:40 PM	26260
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	7/6/2016 1:28:52 PM	26229
Surr: BFB	99.3	80-120	%Rec	1	7/6/2016 1:28:52 PM	26229
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	7/6/2016 1:28:52 PM	26229
Toluene	ND	0.046	mg/Kg	1	7/6/2016 1:28:52 PM	26229
Ethylbenzene	ND	0.046	mg/Kg	1	7/6/2016 1:28:52 PM	26229
Xylenes, Total	ND	0.092	mg/Kg	1	7/6/2016 1:28:52 PM	26229
Surr: 4-Bromofluorobenzene	95.8	80-120	%Rec	1	7/6/2016 1:28:52 PM	26229

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

Lab Order 1607083

Date Reported: 7/13/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: DP-2

Project: MD16 Hydro 5

Collection Date: 7/1/2016 8:50:00 AM

1607083-002 Lab ID:

Matrix: SOIL

Received Date: 7/2/2016 10:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	7/11/2016 10:04:40 PM	26315
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/7/2016 2:43:48 PM	26260
Surr: DNOP	87.6	70-130	%Rec	1	7/7/2016 2:43:48 PM	26260
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/6/2016 5:01:06 PM	26229
Surr: BFB	101	80-120	%Rec	1	7/6/2016 5:01:06 PM	26229
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	7/6/2016 5:01:06 PM	26229
Toluene	ND	0.047	mg/Kg	1	7/6/2016 5:01:06 PM	26229
Ethylbenzene	ND	0.047	mg/Kg	1	7/6/2016 5:01:06 PM	26229
Xylenes, Total	ND	0.093	mg/Kg	1	7/6/2016 5:01:06 PM	26229
Surr: 4-Bromofluorobenzene	96.1	80-120	%Rec	1	7/6/2016 5:01:06 PM	26229

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
- RPD outside accepted recovery limits
- % 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 8 J

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

Lab Order 1607083

Date Reported: 7/13/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: DP-3

Project: MD16 Hydro 5

Collection Date: 7/1/2016 9:00:00 AM

Lab ID:

1607083-003

Matrix: SOIL

Received Date: 7/2/2016 10:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	7/11/2016 10:17:05 PM	1 26315
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/7/2016 3:05:41 PM	26260
Surr: DNOP	93.6	70-130	%Rec	1	7/7/2016 3:05:41 PM	26260
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/6/2016 5:24:40 PM	26229
Surr: BFB	99.3	80-120	%Rec	1	7/6/2016 5:24:40 PM	26229
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	7/6/2016 5:24:40 PM	26229
Toluene	ND	0.049	mg/Kg	1	7/6/2016 5:24:40 PM	26229
Ethylbenzene	ND	0.049	mg/Kg	1	7/6/2016 5:24:40 PM	26229
Xylenes, Total	ND	0.097	mg/Kg	1	7/6/2016 5:24:40 PM	26229
Surr: 4-Bromofluorobenzene	94.3	80-120	%Rec	1	7/6/2016 5:24:40 PM	26229

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
- RPD outside accepted recovery limits
- % 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 3 of 8 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1607083

Date Reported: 7/13/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: MD16 Hydro 5

Lab ID: 1607083-004

Client Sample ID: DP-4

Collection Date: 7/1/2016 9:10:00 AM

Received Date: 7/2/2016 10:15:00 AM

Analyses	Result	PQL Qua	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	7/11/2016 10:54:19 PM	26315
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/7/2016 3:27:48 PM	26260
Surr: DNOP	88.1	70-130	%Rec	1	7/7/2016 3:27:48 PM	26260
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/6/2016 5:48:15 PM	26229
Surr: BFB	101	80-120	%Rec	1	7/6/2016 5:48:15 PM	26229
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	7/6/2016 5:48:15 PM	26229
Toluene	ND	0.047	mg/Kg	1	7/6/2016 5:48:15 PM	26229
Ethylbenzene	ND	0.047	mg/Kg	1	7/6/2016 5:48:15 PM	26229
Xylenes, Total	ND	0.094	mg/Kg	1	7/6/2016 5:48:15 PM	26229
Surr: 4-Bromofluorobenzene	96.3	80-120	%Rec	1	7/6/2016 5:48:15 PM	26229

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 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#: 1607083

13-Jul-16

Client:

APEX TITAN

Project:

MD16 Hydro 5

Sample ID MB-26315

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 26315

PQL

RunNo: 35578

Units: mg/Kg

Analyte

Prep Date: 7/8/2016 Analysis Date: 7/11/2016

SeqNo: 1101772

HighLimit

%RPD **RPDLimit** Qual

Chloride

ND 1.5

SampType: LCS

Result

TestCode: EPA Method 300.0: Anions

Client ID: **LCSS**

Sample ID LCS-26315

Batch ID: 26315

RunNo: 35578

Prep Date: 7/8/2016

SeqNo: 1101773

Units: mg/Kg

Analyte

Analysis Date: 7/11/2016 PQL

%RPD **RPDLimit**

Qual

15.00

Chloride

14

0

SPK value SPK Ref Val %REC LowLimit

HighLimit

1.5

%REC

SPK value SPK Ref Val

94.2

110

90

LowLimit

Page 5 of 8

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

RPD outside accepted recovery limits

В

Analyte detected in the associated Method Blank

Value above quantitation range

J Analyte detected below quantitation limits Sample pH Not In Range

Reporting Detection Limit

% Recovery outside of range due to dilution or matrix

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607083

13-Jul-16

Client:

APEX TITAN

Project:

MD16 Hydro 5

Sample ID MB-26260	SampT	ypė: ME	BLK	Test	Code: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch	ID: 26	260	R	unNo: 3	5477				
Prep Date: 7/6/2016	Analysis D	ate: 7/	7/2016	S	SeqNo: 1	098295	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.1		10.00		91.4	70	130			

Sample ID LCS-26260 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: LCS Batch ID: 26260 Client ID: LCSS RunNo: 35477 Prep Date: 7/6/2016 Analysis Date: 7/7/2016 SeqNo: 1098315 Units: mg/Kg %REC HighLimit %RPD **RPDLimit** Result SPK value SPK Ref Val LowLimit Qual Diesel Range Organics (DRO) 49 10 50.00 98.6 62.6 124 Surr: DNOP 4.4 5.000 87.5 70 130

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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#:

1607083

13-Jul-16

Client:

APEX TITAN

Project:

MD16 Hydro 5

Sample ID MB-26229

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

Result

Batch ID: 26229

PQL

RunNo: 35443

Prep Date: 7/5/2016 Analysis Date: 7/6/2016

SeqNo: 1097615

Units: mg/Kg

120

HighLimit

%RPD **RPDLimit**

ND 5.0 SPK value SPK Ref Val %REC

Qual

Gasoline Range Organics (GRO) Surr: BFB

960

1000

95.5

80

LowLimit

Sample ID LCS-26229

SampType: LCS Batch ID: 26229

TestCode: EPA Method 8015D: Gasoline Range RunNo: 35443

%REC

Client ID: LCSS Prep Date: 7/5/2016

Analysis Date: 7/6/2016

SeqNo: 1097616

Units: mg/Kg **HighLimit**

Analyte Gasoline Range Organics (GRO) Result **PQL** 26

1100

SPK value SPK Ref Val 25.00

80 80

LowLimit

120

%RPD **RPDLimit**

Page 7 of 8

Surr: BFB

5.0 1000

105 108

120

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % 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

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607083

13-Jul-16

Client:

APEX TITAN

Project:

MD16 Hydro 5

Sample ID MB-26229	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 26229			RunNo: 35443						
Prep Date: 7/5/2016	Analysis Date: 7/6/2016			SeqNo: 1097633			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	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		92.8	80	120			

Sample ID LCS-26229	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 26229			RunNo: 35443						
Prep Date: 7/5/2016	Analysis Date: 7/6/2016			SeqNo: 1097635			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.8	75.3	123			
Toluene	0.97	0.050	1.000	0	96.9	80	124			
Ethylbenzene	0.99	0.050	1.000	0	99.4	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	99.2	83.9	122			
Surr: 4-Bromofluorobenzene	0.99		1.000		98.6	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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

RcptNo: 1 Client Name: **APEX AZTEC** Work Order Number: 1607083 Received by/date: Logged By: Joe Archuleta 7/2/2016 10:15:00 AM 7/5/2016 8:51:58 AM Completed By: Joe Archuleta 15116 as Reviewed By: Chain of Custody No 🗌 Not Present Yes 1 Custody seals intact on sample bottles? Not Present No 🗌 Yes 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No 🗍 NA 🗌 4. Was an attempt made to cool the samples? No 🗌 NA 🗍 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗌 6. Sample(s) in proper container(s)? No \square 7. Sufficient sample volume for indicated test(s)? No 🗌 8. Are samples (except VOA and ONG) properly preserved? No 🖈 Yes NA 🔲 9. Was preservative added to bottles? No 🗌 No VOA Vials Yes 🗌 10. VOA vials have zero headspace? No 🙀 11. Were any sample containers received broken? # of preserved bottles checked for pH: No 🗌 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 13. Are matrices correctly identified on Chain of Custody? No 🗌 14. Is it clear what analyses were requested? Checked by: No 🗌 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes NA 🙀 16. Was client notified of all discrepancies with this order? No [... Person Notified: Date By Whom: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition | Seal Intact | Seal No Seal Date 2.3 Good

CHAIN OF CUSTODY RECORD Lab use only ANALYSIS Due Date: REQUESTED Laboratory: Hall Env **APEX** Temp. of coolers Office Location _ Aztec N.m. when received (C°): 2 3 A Freeman Contact: Phone: Project Manager K. Sunners PO/SO #: Sampler's Name Sampler's Signature Proj. No. **Project Name** No/Type of Containers MD16 Hydro #5 7250401/2/71 Start Depth End Depth A/G 1Lt. 250 Glass Jar P/O VOA Identifying Marks of Sample(s) Time Lab Sample ID (Lab Use Only) 7/1/16 8:45 1601083 DP-1 -00 1/1/6 8:50 DA-2 -002 -00 3 71/16 9:00 DP-3 7/16 9:10 -004 DP-4 ☐ 100% Rush Turn around time **Normal** ☐ 25% Rush ☐ 50% Rush Relinquisited by (Signature) Received by: (Signature) Date: Date: Time: 7/1/16 /2.05 Bill to For long 24-16 1260 Received by: (Signature) Date A Helinquished by (Signature) Time: Time: 1015 Received by: (Signature) Relinquished by (Signature) Time: Date: Received by: (Signature) Time: Relinquished by (Signature) Date: Time: Date: W - Water S - Soil SD - Solid A/G - Amber / Or Glass 1 Liter Matrix Container WW - Wastewater L - Liquid A - Air Bag 250 ml - Glass wide mouth C - Charcoal tube P/O - Plastic or other SL - sludge O - Oil

VOA - 40 ml viai



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

Website: www.hallenvironmental.com

July 18, 2016

Kyle Summers APEX TITAN 606 S. Rio Grande Unit A Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Trunk MD 16" Hydro

OrderNo.: 1607307

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 7/6/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Buly

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1607307

Date Reported: 7/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: XP-1

Project:

Trunk MD 16" Hydro

Collection Date: 7/5/2016 2:30:00 PM

Lab ID:

1607307-001

Matrix: SOIL

Received Date: 7/6/2016 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	7/11/2016 3:52:20 PM	26328
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	;			Analyst	TOM
Diesel Range Organics (DRO)	25	9.3	mg/Kg	1	7/11/2016 1:06:02 PM	26309
Surr: DNOP	100	70-130	%Rec	1	7/11/2016 1:06:02 PM	26309
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/8/2016 8:46:15 PM	26286
Surr: BFB	99.8	80-120	%Rec	1	7/8/2016 8:46:15 PM	26286
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	7/8/2016 8:46:15 PM	26286
Toluene	ND	0.048	mg/Kg	1	7/8/2016 8:46:15 PM	26286
Ethylbenzene	ND	0.048	mg/Kg	1	7/8/2016 8:46:15 PM	26286
Xylenes, Total	ND	0.096	mg/Kg	1	7/8/2016 8:46:15 PM	26286
Surr: 4-Bromofluorobenzene	97.4	80-120	%Rec	1	7/8/2016 8:46:15 PM	26286

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
- RPD outside accepted recovery limits
- % 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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1607307

Date Reported: 7/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: XP-2

Project:

Trunk MD 16" Hydro

Collection Date: 7/5/2016 2:40:00 PM

Lab ID:

1607307-002

Matrix: SOIL

Received Date: 7/6/2016 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	7/11/2016 4:04:45 PM	26328
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	7/11/2016 2:34:49 PM	26309
Surr: DNOP	95.1	70-130	%Rec	1	7/11/2016 2:34:49 PM	26309
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/8/2016 9:09:42 PM	26286
Surr: BFB	104	80-120	%Rec	1	7/8/2016 9:09:42 PM	26286
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.024	mg/Kg	1	7/8/2016 9:09:42 PM	26286
Toluene	ND	0.047	mg/Kg	1	7/8/2016 9:09:42 PM	26286
Ethylbenzene	ND	0.047	mg/Kg	1	7/8/2016 9:09:42 PM	26286
Xylenes, Total	ND	0.094	mg/Kg	1	7/8/2016 9:09:42 PM	26286
Surr: 4-Bromofluorobenzene	99.4	80-120	%Rec	1	7/8/2016 9:09:42 PM	26286

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
- RPD outside accepted recovery limits
- % 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 8 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1607307

Date Reported: 7/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: XP-3

Project:

Trunk MD 16" Hydro

Collection Date: 7/5/2016 2:50:00 PM

Lab ID:

1607307-003

Matrix: SOIL

Received Date: 7/6/2016 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	7/11/2016 4:17:10 PM	26328
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/11/2016 2:57:03 PM	26309
Surr: DNOP	94.4	70-130	%Rec	1	7/11/2016 2:57:03 PM	26309
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/8/2016 9:33:03 PM	26286
Surr: BFB	101	80-120	%Rec	1	7/8/2016 9:33:03 PM	26286
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.023	mg/Kg	1	7/8/2016 9:33:03 PM	26286
Toluene	ND	0.047	mg/Kg	1	7/8/2016 9:33:03 PM	26286
Ethylbenzene	ND	0.047	mg/Kg	1	7/8/2016 9:33:03 PM	26286
Xylenes, Total	ND	0.094	mg/Kg	1	7/8/2016 9:33:03 PM	26286
Surr: 4-Bromofluorobenzene	96.5	80-120	%Rec	1	7/8/2016 9:33:03 PM	26286

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
- RPD outside accepted recovery limits
- % 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 3 of 8 J

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

Lab Order 1607307

Date Reported: 7/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: XP-4

Project:

Trunk MD 16" Hydro

Collection Date: 7/5/2016 3:00:00 PM

Lab ID:

1607307-004

Matrix: SOIL

Received Date: 7/6/2016 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	7/11/2016 4:29:35 PM	26328
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/11/2016 3:19:27 PM	26309
Surr: DNOP	85.7	70-130	%Rec	1	7/11/2016 3:19:27 PM	26309
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/8/2016 9:56:28 PM	26286
Surr: BFB	99.2	80-120	%Rec	1	7/8/2016 9:56:28 PM	26286
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	7/8/2016 9:56:28 PM	26286
Toluene	ND	0.048	mg/Kg	1	7/8/2016 9:56:28 PM	26286
Ethylbenzene	ND	0.048	mg/Kg	1	7/8/2016 9:56:28 PM	26286
Xylenes, Total	ND	0.096	mg/Kg	1	7/8/2016 9:56:28 PM	26286
Surr: 4-Bromofluorobenzene	93.9	80-120	%Rec	1	7/8/2016 9:56:28 PM	26286

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
- RPD outside accepted recovery limits
- % 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
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607307

18-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26328

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: **PBS**

Batch ID: 26328

RunNo: 35578

Prep Date: 7/11/2016

Analysis Date: 7/11/2016

SPK value SPK Ref Val %REC LowLimit

Units: mg/Kg

HighLimit

SeqNo: 1101743

%RPD

RPDLimit Qual

Analyte Chloride

Result PQL ND 1.5

Sample ID LCS-26328

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS

Batch ID: 26328

RunNo: 35578

Prep Date: 7/11/2016

Analysis Date: 7/11/2016

SeqNo: 1101744

Units: mg/Kg

RPDLimit %REC %RPD PQL SPK value SPK Ref Val LowLimit HighLimit Qual

Analyte

93.3 Chloride 14 1.5 15.00 0

110

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
- RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- \mathbf{B} Analyte detected in the associated Method Blank
- Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RLReporting Detection Limit
- Sample container temperature is out of limit as specified

Page 5 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607307

18-Jul-16

Client:

APEX TITAN

Project: Trunk	MD 16" Hydro										
Sample ID LCS-26309	SampType: LC	s	Test	tCode: EF	A Method	8015M/D: Di	esel Rang	e Organics			
Client ID: LCSS	Batch ID: 263	309	R	RunNo: 35	5548						
Prep Date: 7/8/2016	Analysis Date: 71	11/2016	S	SeqNo: 11	100969	Units: mg/k	(g				
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Range Organics (DRO)	38 10	50.00	0	75.6	62.6	124					
Surr: DNOP	4.1	5.000		81.5	70	130					
Sample ID MB-26309	SampType: MB	BLK	Test	tCode: EF	A Method	8015M/D: Di	esel Rang	e Organics			
Client ID: PBS	Batch ID: 263	309	R	RunNo: 35548							
Prep Date: 7/8/2016	Analysis Date: 71	11/2016	S	SeqNo: 11	100970	Units: mg/k	ζg				
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	ND 10										
Surr: DNOP	8.5	10.00		84.8	70	130					
Sample ID 1607307-001AN	SampType: MS	3	Test	Code: EF	A Method	8015M/D: Di	esel Range	e Organics			
Client ID: XP-1	Batch ID: 263	309	R	tunNo: 35	5548						
Prep Date: 7/8/2016	Analysis Date: 7/	11/2016	S	SeqNo: 11	101096	Units: mg/K	ζg				
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Range Organics (DRO)	100 10	50.81	0	203	33.9	141			S		
Surr: DNOP	4.7	5.081		92.5	70	130					
Sample ID 1607307-001AN	ISD SampType: MS	SD .	Test	Code: EP	A Method	8015M/D: Die	esel Range	Organics			
Client ID: XP-1	Batch ID: 263	309	R	tunNo: 35	548						
Prep Date: 7/8/2016	Analysis Date: 7/	11/2016	S	eqNo: 11	01097	Units: mg/K	(g				
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	120 9.5	47.26	0	247	33.9	141	12.0	20	S		
Surr: DNOP	4.2	4.726		89.1	70	130	0	0			

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % 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 6 of 8
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

26

1100

5.0

25.00

1000

WO#:

1607307

18-Jul-16

Client:

APEX TITAN

Project:

Gasoline Range Organics (GRO)

Surr: BFB

Trunk MD 16" Hydro

Sample ID MB-26286	SampType: MBLK	TestCode: EPA Method	8015D: Gasoline Range
Client ID: PBS	Batch ID: 26286	RunNo: 35527	
Prep Date: 7/7/2016	Analysis Date: 7/8/2016	SeqNo: 1100342	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	ND 5.0		
Surr: BFB	1000 1000	102 80	120
Sample ID LCS-26286	SampType: LCS	TestCode: EPA Method	8015D: Gasoline Range
Client ID: LCSS	Batch ID: 26286	RunNo: 35527	
Prep Date: 7/7/2016	Analysis Date: 7/8/2016	SeqNo: 1100343	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual

0

103

112

80

80

120

120

Qualifiers:

- 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
- RPD outside accepted recovery limits
- % 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
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Page 7 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607307

18-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26286	TestCode: EPA Method 8021B: Volatiles									
Client ID: PBS	Batcl	n ID: 26	286	R	tunNo: 3	5527				
Prep Date: 7/7/2016	Analysis D)ate: 7/	8/2016	S	SeqNo: 1					
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	0.99		1.000		98.9	80	120			
Sample ID LCS-26286	Samp1	ype: LC	s	Test	Code: El	PA Method	8021B: Vola	tiles		
Sample ID LCS-26286 Client ID: LCSS		ype: LC			Code: El		8021B: Vola	tiles		
		n ID: 26	286	R		5527	8021B: Volat			
Client ID: LCSS	Batcl	n ID: 26	286 8/2016	R	tunNo: 3	5527			RPDLimit	Qual
Client ID: LCSS Prep Date: 7/7/2016	Batcl Analysis D	n ID: 262	286 8/2016	R	eqNo: 1	5527 100372	Units: mg/k	(g	RPDLimit	Qual
Client ID: LCSS Prep Date: 7/7/2016 Analyte	Batcl Analysis D Result	n ID: 26 : Pate: 7 /	286 8/2016 SPK value	R S SPK Ref Val	tunNo: 3 seqNo: 1 %REC	5527 100372 LowLimit	Units: mg/K	(g	RPDLimit	Qual
Client ID: LCSS Prep Date: 7/7/2016 Analyte Benzene	Batcl Analysis D Result 0.99	PQL 0.025	286 8/2016 SPK value 1.000	SPK Ref Val	8unNo: 3 6eqNo: 1 8REC 98.6	5527 100372 LowLimit 75.3	Units: mg/K HighLimit 123	(g	RPDLimit	Qual
Client ID: LCSS Prep Date: 7/7/2016 Analyte Benzene Toluene	Analysis D Result 0.99 0.96	PQL 0.025 0.050	286 8/2016 SPK value 1.000 1.000	SPK Ref Val 0 0	eqNo: 3 eqNo: 1 %REC 98.6 95.8	5527 100372 LowLimit 75.3 80	Units: mg/K HighLimit 123 124	(g	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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 8 of 8



4901 Hawkins Nf. Albuqverque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: APEX AZTEC Work Order Number 1607307 RcptNo: 1 Received by/date: 7/6/2016 7:35:00 AM Logged By: **Lindsay Mangin** 7/7/2016 1:15:37 PM Completed By: **Lindsay Mangin** Reviewed By: Chain of Custody Not Present V 1. Custody seals intact on sample bottles? Yes V No 🗌 Not Present 2. Is Chain of Custody complete? 3 How was the sample delivered? Courier Log In No 🗌 NA . 4. Was an attempt made to cool the samples? Were all samples received at a temperature of >0° C to 6.0°C No 🗌 Sample(s) in proper container(s)? 7. Sufficient sample volume for indicated test(s)? 8. Are samples (except VOA and ONG) properly preserved? No No V NA 9. Was preservative added to bottles? No VOA Vials No . 10. VOA vials have zero headspace? No V 11. Were any sample containers received broken? # of preserved bottles checked No 🗌 for pH: 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 13. Are matrices correctly identified on Chain of Custody? Yes V No 14. Is it clear what analyses were requested? No 🗔 Checked by: Yes V 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) 16. Was client notified of all discrepancies with this order? No | NA V Person Notified: Date By Whom: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date

1.0

Good

																				С	HAIN	OF (CUSTODY RECORI
APEX Office Location Azter, NM Contact: A.Fre Phone: Project Manager K. Summers Sampler's Name Range Deschilly Proj. No. Project Name							Free	in an						QUE	STE	Chlorings FROZORO					Lab use only Due Date: / Č Temp. of coolers when received (C°): 1 2 3 4 5 Page J of }		
Proj. i	lo.			Proje		ame					pe of C	Contain	ers			W .	Sp.	9//	//	/ /			
Matrix	Da	ite	Time	CoEn	Gran		rks of Sample(s)		End	VOA	A/G	250 m	Glass	P/O		/	//	///				Lab S	sample ID (Lab Use Only)
5	715	116	1430			ХP	-1						i		X	X	X				16	0,	1307-001
S			1440			Xp.	- 2						1		*	×	X						-002
S			1450			18							١		1	X	X						-003
5		/	1500			XP	-4)		X	X	×						-004
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Turn a	round	time	\OA\or	mal	Di	25% Rush	50% Rush :	100%	Rush					_									
Turn around time Glormal 25% Rush 350% Rush 3100% Rush Relinquished by (Signature) Date: Time: Received by: (Signature) Date: Date:								Date	ZAR	17 Ti 70	me: 40 me: me: me:				im l	ing '	Epp						
Matrix WW - Wastewater W - Water S - Soll SD - Solid L - Liquid A - Air Bag C - Cha Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Pl									SL	- sludge	O - Oil												



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

August 20, 2016

Thomas Long
Enterprise Field Services
614 Reilly Ave.
Farmington, NM 87401
TEL: (505) 599-2141

FAX

RE: Trunk MD 16 Inch

OrderNo.: 1607128

Dear Thomas Long:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/6/2016 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 13, 2016.

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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1607128

Date Reported: 8/20/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: Rupture #6

Project: Trunk MD 16 Inch

Collection Date: 7/5/2016 11:30:00 AM

Lab ID: 1607128-001

Matrix: AQUEOUS Received Date: 7/6/2016 7:35:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	0.35	0.14	0.50	J	mg/L	5	7/6/2016 5:20:12 PM	A35474
Chloride	37	0.14	2.5		mg/L	5	7/6/2016 5:20:12 PM	A35474
Nitrogen, Nitrite (As N)	ND	0.26	0.50		mg/L	5	7/6/2016 5:20:12 PM	A35474
Bromide	0.93	0.22	0.50		mg/L	5	7/6/2016 5:20:12 PM	A35474
Nitrogen, Nitrate (As N)	0.32	0.20	0.50	J	mg/L	5	7/6/2016 5:20:12 PM	A35474
Phosphorus, Orthophosphate (As P)	ND	1.1	2.5		mg/L	5	7/6/2016 5:20:12 PM	A35474
Sulfate	54	0.71	2.5		mg/L	5	7/6/2016 5:20:12 PM	A35474
EPA METHOD 7470: MERCURY							Analyst: pmf	
Mercury	0.00019	0.000053	0.00020	J	mg/L	1	7/8/2016 1:56:42 PM	26294
EPA 6010B: TOTAL RECOVERABLE	METALS						Analyst: MED	
Arsenic	0.011	0.0082	0.020	J	mg/L	1	7/8/2016 11:39:42 AM	26285
Barium	0.25	0.00070	0.020		mg/L	1	7/8/2016 11:39:42 AM	26285
Cadmium	ND	0.00078	0.0020		mg/L	1	7/8/2016 11:39:42 AM	26285
Calcium	44	0.066	1.0		mg/L	1	7/8/2016 11:39:42 AM	26285
Chromium	0.0047	0.0012	0.0060	J	mg/L	1	7/8/2016 11:39:42 AM	26285
Lead	ND	0.0041	0.0050		mg/L	1	7/8/2016 11:39:42 AM	26285
Magnesium	7.8	0.020	1.0		mg/L	1	7/8/2016 11:39:42 AM	26285
Potassium	19	0.12	1.0		mg/L	1	7/8/2016 11:39:42 AM	26285
Selenium	ND	0.025	0.050		mg/L	1	7/8/2016 11:39:42 AM	26285
Silver	ND	0.00072	0.0050		mg/L	1	7/8/2016 11:39:42 AM	26285
Sodium	18	0.21	1.0		mg/L	1	7/8/2016 11:39:42 AM	26285
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	19	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Toluene	ND	24	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Ethylbenzene	ND	22	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Methyl tert-butyl ether (MTBE)	ND	42	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,2,4-Trimethylbenzene	ND	22	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,3,5-Trimethylbenzene	ND	23	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,2-Dichloroethane (EDC)	ND	23	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,2-Dibromoethane (EDB)	ND	22	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Naphthalene	ND	19	400		μg/L	200	7/6/2016 11:14:45 PM	A35447
1-Methylnaphthalene	ND	41	800		μg/L	200	7/6/2016 11:14:45 PM	A35447
2-Methylnaphthalene	ND	32	800		µg/L	200	7/6/2016 11:14:45 PM	A35447
Acetone	ND	980	2000		μg/L	200	7/6/2016 11:14:45 PM	A35447
Bromobenzene	ND	20	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Bromodichloromethane	ND	28	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Bromoform	ND	20	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Bromomethane	ND	160	600		μg/L	200	7/6/2016 11:14:45 PM	A35447

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 1 of 10

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: Rupture #6

Project: Trunk MD 16 Inch

Collection Date: 7/5/2016 11:30:00 AM

Lab ID: 1607128-001

Matrix: AQUEOUS Received Date: 7/6/2016 7:35:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
2-Butanone	ND	150	2000		μg/L	200	7/6/2016 11:14:45 PM	A35447
Carbon disulfide	ND	120	2000		μg/L	200	7/6/2016 11:14:45 PM	A35447
Carbon Tetrachloride	ND	22	200		µg/L	200	7/6/2016 11:14:45 PM	A35447
Chlorobenzene	ND	23	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Chloroethane	ND	38	400		μg/L	200	7/6/2016 11:14:45 PM	A35447
Chloroform	85	18	200	J	µg/L	200	7/6/2016 11:14:45 PM	A35447
Chloromethane	ND	43	600		μg/L	200	7/6/2016 11:14:45 PM	A35447
2-Chlorotoluene	ND	80	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
4-Chlorotoluene	ND	26	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
cis-1,2-DCE	ND	25	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
cis-1,3-Dichloropropene	ND	21	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,2-Dibromo-3-chloropropane	ND	47	400		μg/L	200	7/6/2016 11:14:45 PM	A35447
Dibromochloromethane	ND	17	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Dibromomethane	ND	24	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,2-Dichlorobenzene	ND	80	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,3-Dichlorobenzene	ND	29	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,4-Dichlorobenzene	ND	29	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Dichlorodifluoromethane	ND	71	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,1-Dichloroethane	ND	22	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,1-Dichloroethene	ND	21	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,2-Dichloropropane	ND	22	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,3-Dichloropropane	ND	31	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
2,2-Dichloropropane	ND	33	400		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,1-Dichloropropene	ND	27	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Hexachlorobutadiene	ND	40	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
2-Hexanone	ND	170	2000		μg/L	200	7/6/2016 11:14:45 PM	A35447
Isopropylbenzene	ND	21	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
4-Isopropyltoluene	ND	28	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
4-Methyl-2-pentanone	ND	86	2000		μg/L	200	7/6/2016 11:14:45 PM	A35447
Methylene Chloride	ND	37	600		μg/L	200	7/6/2016 11:14:45 PM	A35447
n-Butylbenzene	ND	32	600		μg/L	200	7/6/2016 11:14:45 PM	A35447
n-Propylbenzene	ND	26	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
sec-Butylbenzene	ND	25	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Styrene	ND	22	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
tert-Butylbenzene	ND	23	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,1,1,2-Tetrachloroethane	ND	22	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,1,2,2-Tetrachloroethane	ND	26	400		μg/L	200	7/6/2016 11:14:45 PM	A35447
Tetrachloroethene (PCE)	ND	30	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
trans-1,2-DCE	ND	80	200		μg/L	200	7/6/2016 11:14:45 PM	A35447

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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Lab Order 1607128

Date Reported: 8/20/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: Rupture #6

Project: Trunk MD 16 Inch

Collection Date: 7/5/2016 11:30:00 AM

Lab ID: 1607128-001

Matrix: AQUEOUS Received Date: 7/6/2016 7:35:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
trans-1,3-Dichloropropene	ND	21	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,2,3-Trichlorobenzene	ND	23	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,2,4-Trichlorobenzene	ND	27	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,1,1-Trichloroethane	ND	18	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,1,2-Trichloroethane	ND	25	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Trichloroethene (TCE)	ND	35	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
Trichlorofluoromethane	ND	41	200		μg/L	200	7/6/2016 11:14:45 PM	A35447
1,2,3-Trichloropropane	ND	40	400		μg/L	200	7/6/2016 11:14:45 PM	A35447
Vinyl chloride	ND	39	200		µg/L	200	7/6/2016 11:14:45 PM	A35447
Xylenes, Total	ND	73	300		μg/L	200	7/6/2016 11:14:45 PM	A35447
Surr: 1,2-Dichloroethane-d4	97.7	0	70-130		%Rec	200	7/6/2016 11:14:45 PM	A35447
Surr: 4-Bromofluorobenzene	104	0	70-130		%Rec	200	7/6/2016 11:14:45 PM	A35447
Surr: Dibromofluoromethane	100	0	70-130		%Rec	200	7/6/2016 11:14:45 PM	A35447
Surr: Toluene-d8	96.1	0	70-130		%Rec	200	7/6/2016 11:14:45 PM	A35447

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
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Hall Environmental Analysis Laboratory, Inc.

SampType: LCS

WO#:

1607128

20-Aug-16

Client:

Sample ID LCS

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID MB	SampType: MBLK						TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch	ID: A3	5474	F	RunNo: 3	5474								
Prep Date:	Analysis D	ate: 7/	6/2016	8	SeqNo: 1	098104	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Fluoride	ND	0.10												
Chloride	ND	0.50												
Nitrogen, Nitrite (As N)	ND	0.10												
Bromide	ND	0.10												
Nitrogen, Nitrate (As N)	ND	0.10												
Phosphorus, Orthophosphate (As P	ND	0.50												
Culfate	ND	0.50												

The second secon	Batch ID: A35474									
Client ID: LCSW	Batch	ID: A3	5474	R	RunNo: 3	5474				
Prep Date:	Analysis D	ate: 7/	6/2016	S	SeqNo: 10	098105	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	102	90	110			
Chloride	4.9	0.50	5.000	0	97.4	90	110			
Nitrogen, Nitrite (As N)	0.94	0.10	1.000	0	93.9	90	110			
Bromide	2.5	0.10	2.500	0	99.4	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			
Phosphorus, Orthophosphate (As P	5.0	0.50	5.000	0	99.0	90	110			
Sulfate	9.9	0.50	10.00	0	99.3	90	110			

TestCode: EPA Method 300.0: Anions

Qualifiers:

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

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1607128

20-Aug-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID rb	SampT	ype: MBLK		Tes	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	ID: A3544	7	F	RunNo: 3	5447				
Prep Date:	Analysis D	ate: 7/6/20	016	5	SeqNo: 1	097715	Units: µg/L			
Analyte	Result	PQL SF	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	0.28	1.0								J
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0							/	
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
2,2 Distilotopiopalio	140	2.0								

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
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- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1607128

20-Aug-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID rb	SampT	ype: MBI	LK	Tes	Code: EF	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	ID: A35	447	F	RunNo: 3	5447				
Prep Date:	Analysis D	ate: 7/6	/2016	5	SeqNo: 10	097715	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	0.50	10								J
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	10		10.00		99.5	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			
Sample ID 100ng lcs2	SampT	ype: LCS	1	Test	Code: EF	A Method	8260B: VOL	ATILES		
Client ID: LCSW	SampType: LCS Batch ID: A35447			R	unNo: 35	5447				

Sample ID 100ng Ics2	SampTy	pe: LC	S	Test	Code: El	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batch	ID: A3	5447	R	RunNo: 3	5447				
Prep Date:	Analysis Da	ate: 7/	6/2016	S	SeqNo: 1	097716	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.7	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	20	1.0	20.00	0	97.6	70	130			

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 6 of 10

- 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#:

1607128

20-Aug-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID 100ng lcs2	SampTyp	pe: LC	s	Test	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batch I	D: A3	5447	R	RunNo: 3	5447				
Prep Date:	Analysis Dat	te: 7/	6/2016	S	SeqNo: 1	097716	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	107	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	97.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.7	70	130			
Surr: Toluene-d8	10		10.00		99.6	70	130			
Sample ID 1607128-001a ms	SampTyp	pe: MS	3	Test	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: Rupture #6	Batch II	D: A3	5447	R	RunNo: 3	5447				
Prep Date:	Analysis Dat	te: 7/	6/2016	S	SeqNo: 10	097718	Units: µg/L			

Client ID: Rupture #6	Batch	ID: A3	5447	R	RunNo: 3	5447				
Prep Date:	Analysis D	ate: 7/	6/2016	S	SeqNo: 1	097718	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4100	200	4000	0	102	70	130			
Toluene	4000	200	4000	0	101	70	130			
Chlorobenzene	3800	200	4000	0	95.9	70	130			
1,1-Dichloroethene	4200	200	4000	0	105	70	130			
Trichloroethene (TCE)	3900	200	4000	0	96.9	70	130			
Surr: 1,2-Dichloroethane-d4	1900		2000		96.3	70	130			
Surr: 4-Bromofluorobenzene	2100		2000		106	70	130			
Surr: Dibromofluoromethane	2000		2000		99.4	70	130			
Surr: Toluene-d8	2000		2000		99.1	70	130			

Sample ID 1607128-001a mse	SampTy	ype: MS	SD	Test	Code: El	PA Method	8260B: VOL	ATILES		
Client ID: Rupture #6	Batch	ID: A3	5447	R	tunNo: 3	5447				
Prep Date:	Analysis Da	ate: 7/	7/2016	S	eqNo: 1	097719	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4000	200	4000	0	101	70	130	0.863	20	
Toluene ·	4000	200	4000	0	101	70	130	0.101	20	
Chlorobenzene	3800	200	4000	0	94.7	70	130	1.24	20	
1,1-Dichloroethene	4200	200	4000	0	106	70	130	0.576	20	
Trichloroethene (TCE)	3800	200	4000	0	96.0	70	130	0.938	20	
Surr: 1,2-Dichloroethane-d4	2000		2000		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	2000		2000		102	70	130	0	0	
Surr: Dibromofluoromethane	2100		2000		105	70	130	0	0	
Surr: Toluene-d8	2000		2000		99.9	70	130	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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 7 of 10

- 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#:

1607128

20-Aug-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID MB-26294

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Client ID:

Prep Date:

PBW

7/7/2016

Batch ID: 26294 Analysis Date: 7/8/2016 RunNo: 35534

SeqNo: 1100169

Units: mg/L

RPDLimit

Analyte Mercury

Result **PQL** 0.00013 0.00020 SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

Qual

Sample ID LCS-26294

SampType: LCS

TestCode: EPA Method 7470: Mercury

Client ID: LCSW

Batch ID: 26294

RunNo: 35534

Prep Date: 7/7/2016

Analysis Date: 7/8/2016

SegNo: 1100170

Units: mg/L

RPDLimit

Analyte Mercury

Result POI

SPK value SPK Ref Val 0.005000

%REC 100

0

HighLimit LowLimit 80

%RPD

Qual

Sample ID 1607128-001CMS

0.0050 0.00020 SampType: MS

TestCode: EPA Method 7470: Mercury

120

Client ID:

Rupture #6

Rupture #6

Batch ID: 26294

RunNo: 35534

Prep Date: 7/7/2016 Analysis Date: 7/8/2016

SeqNo: 1100172

Units: mg/L

Analyte

Result PQL SPK value SPK Ref Val %REC

LowLimit

RPDLimit

Mercury

0.0064 0.00020 0.005000 0.0001875 125

HighLimit %RPD 125

Qual

Sample ID 1607128-001CMSD Client ID:

SampType: MSD

TestCode: EPA Method 7470: Mercury

RunNo: 35534

Page 8 of 10

Prep Date:

7/7/2016

Batch ID: 26294 Analysis Date: 7/8/2016

SeqNo: 1100173

Units: mg/L HighLimit

Analyte Mercury

PQL SPK value SPK Ref Val Result 0.0061 0.00020 0.005000 0.0001875

%REC 119

75

LowLimit

125

%RPD 4.68 **RPDLimit** Qual 20

Qualifiers:

ND

Value exceeds Maximum Contaminant Level

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Н

Not Detected at the Reporting Limit R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607128 20-Aug-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

Sample ID	MB-26285	Samp ⁷	Type: ME	BLK	Tes	tCode: El	PA 6010B:	Total Recover	able Meta	als '	
Client ID:	PBW	Batc	h ID: 26	285	F	RunNo: 3	5523				
Prep Date:	7/7/2016	Analysis [Date: 7/	8/2016	8	SeqNo: 1	099961	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
A c		ND	0.020								
Barium		ND	0.020								
Cadmium		ND	0.0020								
Calcium		ND	1.0								
Chromium		ND	0.0060								
l		ND	0.0050								
Magnesium		ND	1.0								
Potassium		ND	1.0								
Selenium		ND	0.050								
Silver		ND	0.0050								
Sodium		ND	1.0								

Sample ID LCS-26285	Samp	Type: LC	s	Tes	Code: El	PA 6010B:	Total Recover	able Met	als	
Client ID: LCSW	Bato	h ID: 26	285	R	tunNo: 3	5523				
Prep Date: 7/7/2016	Analysis	Date: 7/	8/2016	S	eqNo: 1	099962	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
A c	0.42	0.020	0.5000	0	84.9	80	120			
Barium	0.41	0.020	0.5000	0	82.6	80	120			
Cadmium	0.42	0.0020	0.5000	0	83.5	80	120			
Calcium	41	1.0	50.00	0	82.3	80	120			
Chromium	0.41	0.0060	0.5000	0	82.9	80	120			
t	0.41	0.0050	0.5000	0	82.5	80	120			
Magnesium	41	1.0	50.00	0	81.4	80	120			
Potassium	40	1.0	50.00	0	80.4	80	120			
Selenium	0.43	0.050	0.5000	0	86.2	80	120			
Silver	0.083	0.0050	0.1000	0	83.2	80	120			
Sodium	38	1.0	50.00	0	76.6	80	120			S

Sample ID 1607128-001CMS	Samp	Туре: М	3	Tes	tCode: E	PA 6010B:	Total Recove	rable Meta	als	
Client ID: Rupture #6	Bato	h ID: 26	285	F	RunNo: 3	5523				
Prep Date: 7/7/2016	Analysis	Date: 7/	8/2016	8	SeqNo: 1	099983	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.46	0.020	0.5000	0.01055	90.8	75	125			
Barium	0.71	0.020	0.5000	0.2516	90.8	75	125			
Cadmium	0.45	0.0020	0.5000	0	90.4	75	125			
Calcium	90	1.0	50.00	44.00	91.5	75	125			
Chromium	0.46	0.0060	0.5000	0.004670	90.5	75	125			
I	0.45	0.0050	0.5000	0	90.1	75	125			

Qualifiers:

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

Page 9 of 10

- 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#: 1607128

20-Aug-16

Client:

Enterprise Field Services

Project:

Trunk MD 16 Inch

ple ID 1607128-001CMS	Samp	Type: MS	3	Tes	tCode: E	PA 6010B:	Total Recover	able Meta	als	
Client ID: Rupture #6	Batc	h ID: 26	285	F	RunNo: 3	5523				
Prep Date: 7/7/2016	Analysis [Date: 7/	8/2016	S	SeqNo: 1	099983	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	53	1.0	50.00	7.794	90.2	75	125			
Potassium	64	1.0	50.00	19.09	89.4	75	125			
: n	0.44	0.050	0.5000	0	88.6	75	125			
Silver	0.090	0.0050	0.1000	0	90.3	75	125			
Sodium	61	1.0	50.00	18.00	86.0	75	125			

Sample ID	1607128-001CMSE	Samp	Type: MS	SD	Tes	tCode: El	PA 6010B:	Total Recover	able Meta	als	
Client ID:	Rupture #6	Bato	th ID: 26	285	R	RunNo: 3	5523				
Prep Date:	7/7/2016	Analysis I	Date: 7/	8/2016	S	SeqNo: 1	099984	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
t c		0.48	0.020	0.5000	0.01055	94.3	75	125	3.69	20	
Barium		0.73	0.020	0.5000	0.2516	95.1	75	125	3.06	20	
Cadmium		0.46	0.0020	0.5000	0	92.5	75	125	2.27	20	
Calcium		92	1.0	50.00	44.00	95.7	75	125	2.32	20	
Chromium		0.47	0.0060	0.5000	0.004670	92.4	75	125	2.13	20	
		0.46	0.0050	0.5000	0	92.1	75	125	2.17	20	
Magnesium		54	1.0	50.00	7.794	91.5	75	125	1.29	20	
Potassium		65	1.0	50.00	19.09	92.3	75	125	2.29	20	
n		0.45	0.050	0.5000	0	89.7	75	125	1.26	20	
Silver		0.092	0.0050	0.1000	0	92.4	75	125	2.29	20	
Sodium		61	1.0	50.00	18.00	86.7	75	125	0.582	20	

Qualifiers:

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

Page 10 of 10

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



ifall Environmental Analysis Laboratory 4991 Howkins NL

Albaquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenviroamental.com

Sample Log-In Check List

			-	AND DESCRIPTION OF THE PERSON NAMED IN			
Client Name: Enter	prise	Work Order Number	16071	28		RcptNo-	1
Received by/date	Ar	ortalis					
Logged By: Lind	say Mangin	7/6/2016 7:35:00 AM	,	03	Allego		
Completed By: Lind	Isay Mangin	7/6/2016 8:53:18 AM		And	Allego		
Reviewed By:	Q_{i}	07/06/16		V			
Chain of Custody	1	01/44/10					
1. Custody seals intac	ct on sample bottles?		Yes	No.		Not Present	
2. Is Chain of Custody	y complete?		Yes	✓ No		Not Present	
3. How was the samp	le delivered?		Courie	er.			
Log In							
4. Was an attempt m	ade to cool the sampl	es?	Yes	₩ N	0	NA 🗀	
5. Were all samples re	eceived at a temperat	ture of >0° C to 6.0°C	Yes !	✓ No		NA T	
6. Sample(s) in prope	er container(s)?		Yes	✓ No	_		
7. Sufficient sample v	olume for indicated te	st(s)?	Yes	✓ No			
8. Are samples (excep	pt VOA and ONG) pro	perly preserved?	Yes	✓ No	L		
9. Was preservative a	added to bottles?		Yes	No	~	NA 🛄	
10.VOA vials have zer	o headspace?		Yes	✓ No	L	No VOA Vials	
11, Were any sample of	-	roken?	Yes	No	V		
						# of preserved bottles checked	1
12. Does paperwork ma	atch bottle labels? s on chain of custody)		Yes	✓ No		for pH:	r >12 unless noted)
13. Are matrices correct	-		Yes	✓ No		Adjusted?	No
14. Is it clear what anal			Yes	✓ No			
15. Were all holding tim (If no, notify custom	nes able to be met? ner for authorization.)		Yes	✓ No		Checked by:	0.3
Special Handling ((if applicable)						
16, Was client notified		ith this order?	Yes	No		NA 🗹	
Person Notific	ed:	Date					
By Whom:		Via:	eMai	Phone	Fax	In Person	
Regarding:							
Client Instruc	tions:						
17. Additional remarks	X.						
18 Cooler Informatio	n						
The second secon	mp °C Condition		Seal Dat	e Signed	Бу		
1 1.0	Good	Yes					

If necessary, s	1230				76 1150 1	119	ate Time	EDD (Type)	NELAD	creditation	Standard	iail or Fax#: t	one # \$6\$ -	ca minchan	illing Address: 14		ent: Entipose	Chain-
The Submitted to Hall Erwinonmental may be sub	Reitriquished by. Reitriquished by. Reitriquished by.				Care, Unphus # 6	11 0 10	Matrix Sample Request ID		Other		☐ Level 4 (Full Validation)	long	547-2286	1 OHES MIN IN	614 Roily Ave.		onse Pladuets	Chain-of-Custody Record
17-40 CT MCLLE 17-accessary, samples submitted to Hall Environmental may be subminimized in other accreated laboratories. This serves as notice of this possibility.	atradibile. The 12				THOSE THIS -(1)	PART STAN	Container Preservative HEAL No. Type and # Type LOTIC	Sample Temperature: 10	On los: Y Yes □ No	Sampler: 75C	Thomas long	Project Manager.		Project #:	Irank 190 16 Inch		X Rush	Jum-Around lime: 3 de.1
is possibility. Any sub-contracted data will be clearly notated on the analytical report.	Romarks: 764P Limits				× ×	<	BTEX + MT BTEX + MT TPH 80156 TPH (Methor EDB (Methor PAH's (831 RCRA 8 More Anions (F.C.) 8081 Pestion 8260B (VO) 8270 (Semi	GO of 4 od 5 od 4 od 5 od 6	+ T RO 118. 604. 7 82 3 O ₃ , (1) 1) 1) 1) NO ₂	(Gas of RO / MI SIMS) .,PO ₄ ,So 2 PCB's	nly) RO)	Analysis Request	Tel. 505-345-3975 Fax 505-345-4107	4901 Hawkins NE - Albuquerque, NM 87109	www_hallenvironmental.com	ANALYSIS LABORATO	HALL ENVIRONMENT

Air Bubbles (Y or N)



Chain-of-Custody Record

Turn-Around Time:

HALL ENVIRONMENTAL ANALYSIS LABORATORY



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

July 25, 2016.

Kyle Summers

APEX TITAN

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Trunk MD 16" Hydro

OrderNo.: 1607412

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 7/9/2016 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 18, 2016.

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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1607412

Date Reported: 7/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HP-1

Project: Trunk MD 16" Hydro

Collection Date: 7/8/2016 3:15:00 PM

Lab ID: 1607412-001

Matrix: SOIL

Received Date: 7/9/2016 11:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: MRA
Chloride	ND	30	mg/Kg	20	7/21/2016 9:57:57 AM	26529
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analys	: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/12/2016 4:44:16 PM	26331
Surr: DNOP	97.3	70-130	%Rec	1	7/12/2016 4:44:16 PM	26331
EPA METHOD 8015D: GASOLINE RANG	GE .				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/12/2016 4:39:50 PM	26325
Surr: BFB	100	80-120	%Rec	1	7/12/2016 4:39:50 PM	26325
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	7/12/2016 4:39:50 PM	26325
Toluene	ND	0.050	mg/Kg	1	7/12/2016 4:39:50 PM	26325
Ethylbenzene	ND	0.050	mg/Kg	1	7/12/2016 4:39:50 PM	26325
Xylenes, Total	ND	0.10	mg/Kg	1	7/12/2016 4:39:50 PM	26325
Surr: 4-Bromofluorobenzene	96.3	80-120	%Rec	1	7/12/2016 4:39:50 PM	26325

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 7
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1607412

Date Reported: 7/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HP-2

Project: Trunk MD 16" Hydro Collection Date: 7/8/2016 3:25:00 PM

1607412-002 Lab ID:

Matrix: SOIL

Received Date: 7/9/2016 11:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	7/21/2016 10:35:11 AM	26529
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/12/2016 5:06:10 PM	26331
Surr: DNOP	102	70-130	%Rec	1	7/12/2016 5:06:10 PM	26331
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/12/2016 5:03:21 PM	26325
Surr: BFB	99.2	80-120	%Rec	1	7/12/2016 5:03:21 PM	26325
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	7/12/2016 5:03:21 PM	26325
Toluene	ND	0.048	mg/Kg	1	7/12/2016 5:03:21 PM	26325
Ethylbenzene	ND	0.048	mg/Kg	1	7/12/2016 5:03:21 PM	26325
Xylenes, Total	ND	0.096	mg/Kg	1	7/12/2016 5:03:21 PM	26325
Surr: 4-Bromofluorobenzene	94.4	80-120	%Rec	1	7/12/2016 5:03:21 PM	26325

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
- RPD outside accepted recovery limits
- % 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 7 J

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

Lab Order 1607412

Date Reported: 7/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HP-3

Project: Trunk MD 16" Hydro

Collection Date: 7/8/2016 3:35:00 PM

Lab ID: 1607412-003

Matrix: SOIL

Received Date: 7/9/2016 11:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	7/21/2016 10:47:36 AM	26529
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/12/2016 5:27:51 PM	26331
Surr: DNOP	100	70-130	%Rec	1	7/12/2016 5:27:51 PM	26331
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	7/12/2016 5:27:04 PM	26325
Surr: BFB	95.6	80-120	%Rec	1	7/12/2016 5:27:04 PM	26325
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.023	mg/Kg	1	7/12/2016 5:27:04 PM	26325
Toluene	ND	0.046	mg/Kg	1	7/12/2016 5:27:04 PM	26325
Ethylbenzene	ND	0.046	mg/Kg	1	7/12/2016 5:27:04 PM	26325
Xylenes, Total	ND	0.092	mg/Kg	1	7/12/2016 5:27:04 PM	26325
Surr: 4-Bromofluorobenzene	94.1	80-120	%Rec	1	7/12/2016 5:27:04 PM	26325

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 7
- 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#:

1607412

25-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26529

SampType: mblk

TestCode: EPA Method 300.0: Anions

TestCode: EPA Method 300.0: Anions

LowLimit

Client ID: PBS

Sample ID LCS-26529

Batch ID: 26529

RunNo: 35903

Prep Date: 7/21/2016

Analysis Date: 7/21/2016

SeqNo: 1111501

Units: mg/Kg

RPDLimit

Qual

Analyte Chloride

PQL ND

1.5

HighLimit

%RPD

SampType: Ics Batch ID: 26529

RunNo: 35903

Client ID: LCSS Prep Date: 7/21/2016

Analysis Date: 7/21/2016

SeqNo: 1111502

Units: mg/Kg

HighLimit %RPD

Analyte

PQL SPK value SPK Ref Val %REC

1.5

110

15

15.00

0

SPK value SPK Ref Val %REC LowLimit

Chloride

97.2

90

Page 4 of 7

RPDLimit Qual

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

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607412

25-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Trank .	THE TO TIYOUTO								
Sample ID LCS-26331	SampType:	SampType: LCS TestCode: EPA Method 8015M/D: Diesel Rang						e Organics	
Client ID: LCSS	Batch ID:	26331	RunNo: 35611						
Prep Date: 7/11/2016	Analysis Date:	7/12/2016	8	SeqNo: 1	102563	Units: mg/K	(g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10 50.00	0	100	62.6	124			
Surr: DNOP	4.7	5.000		93.8	70	130			
Sample ID MB-26331	SampType:	MBLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch ID:	26331	F	RunNo: 3	5611				
Prep Date: 7/11/2016	Analysis Date:	7/12/2016	S	SeqNo: 1	102564	Units: mg/K	(g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND '	10							
Surr: DNOP	9.0	10.00		90.2	70	130			

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 5 of 7

- 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#: **1607412**

25-Jul-16

Client:

APEX TITAN

Project:	Trunk MI	D 16" Hyd	ro								
Sample ID	MB-26325	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	8015D: Gase	oline Rang	e ·	
Client ID:	PBS	Batch	ID: 26	325	F	RunNo: 3	5619				
Prep Date:	7/11/2016	Analysis D	ate: 7/	12/2016	5	SeqNo: 1	102390	Units: mg/l	K g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0								
Surr: BFB		950		1000		94.7	80	120			
Sample ID LCS-26325 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range											
Client ID:	LCSS	Batch	ID: 26	325	F	RunNo: 3	5619				
Prep Date:	7/11/2016	Analysis D	ate: 7/	12/2016	8	SeqNo: 1	102391	Units: mg/l	K g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	26	5.0	25.00	0	103	80	120			
Surr: BFB		1000		1000		105	80	120			
Sample ID	1607412-002AMS	SampT	ype: M\$	3	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	е	
Client ID:	HP-2	Batch	ID: 26	325	F	RunNo: 3	5619				
Prep Date:	7/11/2016	Analysis D	ate: 7/	12/2016	8	SeqNo: 1	102394	Units: mg/l	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	27	4.8	23.83	0	115	59.3	143			
Surr: BFB		1100		953.3		111	80	120			
Sample ID	1607412-002AMSE) SampT	ype: MS	SD	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	е	
Client ID:	HP-2	Batch	ID: 26	325	F	RunNo: 3	5619				
Prep Date:	7/11/2016	Analysis D	ate: 7/	12/2016	8	SeqNo: 1	102395	Units: mg/l	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e Organics (GRO)	27	4.9	24.32	0	109	59.3	143	2.93	20	
Surr: BFB		1100		972.8		109	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

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 6 of 7

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#: 1607412

25-Jul-16

APEX TITAN

Client: Project:	APEX TI Trunk MI		dro								
Sample ID			Гуре: МЕ	DI K	Ton	tCodo: El	DA Mothod	9024B: Volc	tilos		
,			•		TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBS		h ID: 26			RunNo: 3					
Prep Date:	7/11/2016	Analysis [Date: 7/	12/2016	8	SeqNo: 1	102416	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-Bron	nofluorobenzene	0.91		1.000		91.2	80	120			
Sample ID	LCS-26325	Samp	Type: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: 26	325	F	RunNo: 3	5619				
Prep Date:	7/11/2016	Analysis [Date: 7/	12/2016	5	SeqNo: 1	102417	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.97	0.025	1.000	0	96.6	75.3	123			
Toluene		0.95	0.050	1.000	0	95.5	80	124			
Ethylbenzene		0.99	0.050	1.000	0	99.3	82.8	121			
Xylenes, Total		3.0	0.10	3.000	0	99.1	83.9	122			
Surr: 4-Bron	nofluorobenzene	0.97		1.000		97.0	80	120			
Sample ID	1607412-001AMS	Samp	Гуре: М	3	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	HP-1	Batc	h ID: 26	325	F	RunNo: 3	5619				
Prep Date:	7/11/2016	Analysis [Date: 7/	12/2016	S	SeqNo: 1	102419	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.98	0.023	0.9302	0	105	71.5	122			
Toluene		1.0	0.047	0.9302	0	109	71.2	123			
Ethylbenzene		1.1	0.047	0.9302	0	115	75.2	130			
Xylenes, Total		3.2	0.093	2.791	0	115	72.4	131			
Surr: 4-Bron	nofluorobenzene	0.92		0.9302		98.8	80	120			
Sample ID	1607412-001AMSE	Samp1	Гуре: М	SD	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	HP-1	Batc	h ID: 26	325	F	RunNo: 3	5619				
Prep Date:	7/11/2016	Analysis [Date: 7/	12/2016	S	SeqNo: 1	102421	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.99	0.024	0.9690	0	102	71.5	122	1.52	20	
Toluene		0.98	0.048	0.9690	0	101	71.2	123	3.72	20	
Ethylbenzene		1.0	0.048	0.9690	0	108	75.2	130	2.07	20	
Xylenes, Total		3.1	0.097	2.907	0	107 97.9	72.4 80	131	3.25	20	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

mple nH Not In Pange

Page 7 of 7

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



riou 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

APEX AZTEC Work Order Number: 1607412 RcptNo: 1 Client Name: 27/09/16 Received by/date: Logged By: 7/9/2016 11:08:00 AM 7/9/2016 (12:50:37 PM Completed By: **Lindsay Mangin** Reviewed By: Chain of Custody Yes Not Present ▼ 1. Custody seals intact on sample bottles? Yes V No Not Present 2. Is Chain of Custody complete? 3 How was the sample delivered? Courier Log In No. NA Yes V 4. Was an attempt made to cool the samples? 5. Were all samples received at a temperature of >0° C to 6.0°C No Sample(s) in proper container(s)? Yes V No 7. Sufficient sample volume for indicated test(s)? Yes V No 8. Are samples (except VOA and ONG) properly preserved? Yes V No V NA 9. Was preservative added to bottles? No 🗌 No VOA Vials 10. VOA vials have zero headspace? Yes Yes No V 11. Were any sample containers received broken? # of preserved bottles checked for pH: No _ Yes V 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? Yes V No 13. Are matrices correctly identified on Chain of Custody? 14. Is it clear what analyses were requested? Yes V No __ Checked by No . 15. Were all holding times able to be met? Yes V (If no, notify customer for authorization.) Special Handling (if applicable) 16. Was client notified of all discrepancies with this order? Yes . No NA V Person Notified: Date By Whom: Via: eMail Phone Fax In Person Regarding Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp C Condition | Seal Intact | Seal No | Seal Date 3.3 Good

				CHAIN OF CUSTODY RECORD
Office Location	Contact: A, E Phone: PO/SO #:	; NM	ANALYSIS REQUESTED	Lab use only Due Date: Temp. of coolers when received (C*) 1 2 3 4 5 Page of
Rance Deechilly 5	Ribuch S			/ /
Proj. No. Project Name		No/Type of Containers	Substantial Control of State o	
C G C G	16" Hydro			
Matrix Date Time O r Identifying Mark	ss of Sample(s)	VOA A/G 144. 250 and A/G Jar B/O		Lab Sample ID (Lab Use Only)
S 7/8/16 1515 X HP-	-1	-	XXX	1607412-001
5 1 1525 X He	-2		XXX	-002
S V 1535 X HP	-3		* * X	-203
	NES			
Turn around time Aormal 25% Rush	50% Rush			
Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature)	ime: Received by: Signa ture) Qate:	Time: NOTES:	Tom lung EPROD	
	- Soil SD - Solid L - Liquid	A - Air Bag C - Cha	rocal tube SL - sludge O - Oil	



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

July 28, 2016

Kyle Summers
APEX TITAN

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Trunk MD 16" Hydro

OrderNo.: 1607562

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 7/12/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1607562

Date Reported: 7/28/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: CP-1

Project: Trunk MD 16" Hydro Collection Date: 7/11/2016 12:30:00 PM

Lab ID:

1607562-001

Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Fluoride	0.71	0.30	mg/Kg	1	7/15/2016 2:48:45 PM	26445
Chloride	3.4	1.5	mg/Kg	1	7/15/2016 2:48:45 PM	26445
Nitrogen, Nitrite (As N)	ND	0.30	mg/Kg	1	7/15/2016 2:48:45 PM	26445
Bromide	ND	0.30	mg/Kg	1	7/15/2016 2:48:45 PM	26445
Nitrogen, Nitrate (As N)	0.84	0.30	mg/Kg	1	7/15/2016 2:48:45 PM	26445
Phosphorus, Orthophosphate (As P)	ND	1.5	mg/Kg	1	7/15/2016 2:48:45 PM	26445
Sulfate	17	1.5	mg/Kg	1	7/15/2016 2:48:45 PM	26445
EPA METHOD 6010B: SOIL METALS					Analyst	: MED
Calcium	1900	50	mg/Kg	2	7/14/2016 10:33:33 AM	26385
Magnesium	1100	50	mg/Kg	2	7/14/2016 10:33:33 AM	26385
Potassium	730	100	mg/Kg	2	7/14/2016 10:33:33 AM	26385
Sodium	ND	50	mg/Kg	2	7/14/2016 10:33:33 AM	26385
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS	;			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/14/2016 3:45:14 PM	26377
Surr: DNOP	95.5	70-130	%Rec	1	7/14/2016 3:45:14 PM	26377
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/15/2016 6:13:41 PM	26374
Surr: BFB	98.3	80-120	%Rec	1	7/15/2016 6:13:41 PM	26374
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	7/15/2016 6:13:41 PM	26374
Toluene	ND	0.047	mg/Kg	1	7/15/2016 6:13:41 PM	26374
Ethylbenzene	ND	0.047	mg/Kg	1	7/15/2016 6:13:41 PM	26374
Xylenes, Total	ND	0.093	mg/Kg	1	7/15/2016 6:13:41 PM	26374
Surr: 4-Bromofluorobenzene	94.6	80-120	%Rec	1	7/15/2016 6:13:41 PM	26374

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
- R RPD outside accepted recovery limits
- % 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 11 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1607562

Date Reported: 7/28/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: CP-2

Project:

Trunk MD 16" Hydro

Collection Date: 7/11/2016 12:40:00 PM

1607562-002 Lab ID:

Matrix: SOIL

Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	LGT
Fluoride	0.74	0.30	mg/Kg	1	7/15/2016 12:44:38 PM	26445
Chloride	3.6	1.5	mg/Kg	1	7/15/2016 12:44:38 PM	26445
Nitrogen, Nitrite (As N)	ND	0.30	mg/Kg	1	7/15/2016 12:44:38 PM	26445
Bromide	ND	0.30	mg/Kg	1	7/15/2016 12:44:38 PM	26445
Nitrogen, Nitrate (As N)	1.4	0.30	mg/Kg	1	7/15/2016 12:44:38 PM	26445
Phosphorus, Orthophosphate (As P)	ND	1.5	mg/Kg	1	7/15/2016 12:44:38 PM	26445
Sulfate	11	1.5	mg/Kg	1	7/15/2016 12:44:38 PM	26445
EPA METHOD 6010B: SOIL METALS					Analyst:	MED
Calcium	790	25	mg/Kg	1	7/14/2016 10:37:44 AM	26385
Magnesium	590	25	mg/Kg	1	7/14/2016 10:37:44 AM	26385
Potassium	550	49	mg/Kg	1	7/14/2016 10:37:44 AM	26385
Sodium	29	25	mg/Kg	1	7/14/2016 10:37:44 AM	26385
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3			Analyst:	TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/14/2016 4:13:35 PM	26377
Surr: DNOP	98.4	70-130	%Rec	1	7/14/2016 4:13:35 PM	26377
EPA METHOD 8015D: GASOLINE RANGE	•				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/15/2016 7:24:24 PM	26374
Surr: BFB	99.5	80-120	%Rec	1	7/15/2016 7:24:24 PM	26374
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.023	mg/Kg	1	7/15/2016 7:24:24 PM	26374
Toluene	ND	0.047	mg/Kg	1	7/15/2016 7:24:24 PM	26374
Ethylbenzene	ND	0.047	mg/Kg	1	7/15/2016 7:24:24 PM	26374
Xylenes, Total	ND	0.094	mg/Kg	1	7/15/2016 7:24:24 PM	26374
Surr: 4-Bromofluorobenzene	95.5	80-120	%Rec	1	7/15/2016 7:24:24 PM	26374

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
- R RPD outside accepted recovery limits
- % 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 11 J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1607562

Date Reported: 7/28/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: CP-3

Project: Trunk MD 16" Hydro

Collection Date: 7/11/2016 12:50:00 PM

Lab ID: 1607562-003

Matrix: SOIL

Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Fluoride	1.2	0.30	mg/Kg	1	7/15/2016 1:34:17 PM	26445
Chloride	4.6	1.5	mg/Kg	1	7/15/2016 1:34:17 PM	26445
Nitrogen, Nitrite (As N)	ND	0.30	mg/Kg	1	7/15/2016 1:34:17 PM	26445
Bromide	ND	0.30	mg/Kg	1	7/15/2016 1:34:17 PM	26445
Nitrogen, Nitrate (As N)	1.0	0.30	mg/Kg	1	7/15/2016 1:34:17 PM	26445
Phosphorus, Orthophosphate (As P)	ND	1.5	mg/Kg	1	7/15/2016 1:34:17 PM	26445
Sulfate	10	1.5	mg/Kg	1	7/15/2016 1:34:17 PM	26445
EPA METHOD 6010B: SOIL METALS					Analyst	MED
Calcium	1400	25	mg/Kg	1	7/14/2016 10:46:30 AM	26385
Magnesium	1300	25	mg/Kg	1	7/14/2016 10:46:30 AM	26385
Potassium	870	50	mg/Kg	1	7/14/2016 10:46:30 AM	26385
Sodium	32	25	mg/Kg	1	7/14/2016 10:46:30 AM	26385
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/14/2016 4:41:51 PM	26377
Surr: DNOP	95.5	70-130	%Rec	1	7/14/2016 4:41:51 PM	26377
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/15/2016 7:47:53 PM	26374
Surr: BFB	96.4	80-120	%Rec	1	7/15/2016 7:47:53 PM	26374
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	7/15/2016 7:47:53 PM	26374
Toluene	ND	0.047	mg/Kg	1	7/15/2016 7:47:53 PM	26374
Ethylbenzene	ND	0.047	mg/Kg	1	7/15/2016 7:47:53 PM	26374
Xylenes, Total	ND	0.094	mg/Kg	1	7/15/2016 7:47:53 PM	26374
Surr: 4-Bromofluorobenzene	92.2	80-120	%Rec	1	7/15/2016 7:47:53 PM	26374

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits 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 1607562

Date Reported: 7/28/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: CP-4

Project: Trunk MD 16" Hydro Collection Date: 7/11/2016 1:00:00 PM

1607562-004 Lab ID:

Matrix: SOIL

Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Fluoride	0.45	0.30	mg/Kg	1	7/15/2016 1:59:07 PM	26445
Chloride	2.5	1.5	mg/Kg	1	7/15/2016 1:59:07 PM	26445
Nitrogen, Nitrite (As N)	ND	0.30	mg/Kg	1	7/15/2016 1:59:07 PM	26445
Bromide	ND	0.30	mg/Kg	1	7/15/2016 1:59:07 PM	26445
Nitrogen, Nitrate (As N)	0.55	0.30	mg/Kg	1	7/15/2016 1:59:07 PM	26445
Phosphorus, Orthophosphate (As P)	ND	1.5	mg/Kg	1	7/15/2016 1:59:07 PM	26445
Sulfate	5.7	1.5	mg/Kg	1	7/15/2016 1:59:07 PM	26445
EPA METHOD 6010B: SOIL METALS					Analyst	MED
Calcium	660	25	mg/Kg	1	7/14/2016 10:49:13 AM	26385
Magnesium	380	25	mg/Kg	1	7/14/2016 10:49:13 AM	26385
Potassium	370	49	mg/Kg	1	7/14/2016 10:49:13 AM	26385
Sodium	ND	25	mg/Kg	1	7/14/2016 10:49:13 AM	26385
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/14/2016 5:10:07 PM	26377
Surr: DNOP	98.2	70-130	%Rec	1	7/14/2016 5:10:07 PM	26377
EPA METHOD 8015D: GASOLINE RANGE	=				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/15/2016 8:11:16 PM	26374
Surr: BFB	98.1	80-120	%Rec	1	7/15/2016 8:11:16 PM	26374
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	7/15/2016 8:11:16 PM	26374
Toluene	ND	0.047	mg/Kg	1	7/15/2016 8:11:16 PM	26374
Ethylbenzene	ND	0.047	mg/Kg	1	7/15/2016 8:11:16 PM	26374
Xylenes, Total	ND	0.094	mg/Kg	1	7/15/2016 8:11:16 PM	26374
Surr: 4-Bromofluorobenzene	93.9	80-120	%Rec	1	7/15/2016 8:11:16 PM	26374

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
- RPD outside accepted recovery limits
- % 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 11 J
- Sample pH Not In Range P
- RLReporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1607562

Date Reported: 7/28/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Lab ID: 1607562-005

Project:

Trunk MD 16" Hydro

Matrix: SOIL

Client Sample ID: CP-5

Collection Date: 7/11/2016 1:10:00 PM

Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Fluoride	2.3	0.30	mg/Kg	1	7/15/2016 2:23:55 PM	26445
Chloride	6.1	1.5	mg/Kg	1	7/15/2016 2:23:55 PM	26445
Nitrogen, Nitrite (As N)	ND	0.30	mg/Kg	1	7/15/2016 2:23:55 PM	26445
Bromide	ND	0.30	mg/Kg	1	7/15/2016 2:23:55 PM	26445
Nitrogen, Nitrate (As N)	ND	0.30	mg/Kg	1	7/15/2016 2:23:55 PM	26445
Phosphorus, Orthophosphate (As P)	ND	1.5	mg/Kg	1	7/15/2016 2:23:55 PM	26445
Sulfate	15	1.5	mg/Kg	1	7/15/2016 2:23:55 PM	26445
EPA METHOD 6010B: SOIL METALS					Analyst	MED
Calcium	1100	25	mg/Kg	1	7/14/2016 10:51:58 AM	26385
Magnesium	570	25	mg/Kg	1	7/14/2016 10:51:58 AM	26385
Potassium	440	50	mg/Kg	1	7/14/2016 10:51:58 AM	26385
Sodium	35	25	mg/Kg	1	7/14/2016 10:51:58 AM	26385
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/14/2016 5:38:43 PM	26377
Surr: DNOP	99.9	70-130	%Rec	1	7/14/2016 5:38:43 PM	26377
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/15/2016 8:34:41 PM	26374
Surr: BFB	96.8	80-120	%Rec	1	7/15/2016 8:34:41 PM	26374
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	7/15/2016 8:34:41 PM	26374
Toluene	ND	0.048	mg/Kg	1	7/15/2016 8:34:41 PM	26374
Ethylbenzene	ND	0.048	mg/Kg	1	7/15/2016 8:34:41 PM	26374
Xylenes, Total	ND	0.096	mg/Kg	1	7/15/2016 8:34:41 PM	26374
Surr: 4-Bromofluorobenzene	91.7	80-120	%Rec	1	7/15/2016 8:34:41 PM	26374

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
- RPD outside accepted recovery limits R
- % 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 5 of 11 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#:

1607562

28-Jul-16

Client:

APEX TITAN

Project: Trunk M	D 16" Hyd	ro								
Sample ID MB-26445	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	300.0: Anion	ıs	*	
Client ID: PBS	Batch	ID: 264	445	F	RunNo: 3	5763				
Prep Date: 7/15/2016	Analysis D	ate: 7/	15/2016	S	SeqNo: 1	106514	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.30								
Chloride	ND	1.5								
Nitrogen, Nitrite (As N)	ND	0.30								
Bromide	ND	0.30								
Nitrogen, Nitrate (As N)	ND	0.30								
Phosphorus, Orthophosphate (As P	ND	1.5								
Sulfate	ND	1.5								
Sample ID LCS-26445	SampT	ype: LC	s	Tes	Code: El	PA Method	300.0: Anion	s		
Client ID: LCSS	Batch	ID: 264	445	RunNo: 35763						
Prep Date: 7/15/2016	Analysis D	ate: 7/	15/2016	S	SeqNo: 1	106515	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.5	0.30	1.500	0	102	90	110			
Chloride	14	1.5	15.00	0	92.5	90	110			
Nitrogen, Nitrite (As N)	2.8	0.30	3.000	0	93.8	90	110			
Bromide	6.8	0.30	7.500	0	90.7	90	110			
Nitrogen, Nitrate (As N)	7.3	0.30	7.500	0	97.0	90	110			
Phosphorus, Orthophosphate (As P	14	1.5	15.00	0	92.6	90	110			
Sulfate	29	1.5	30.00	0	95.5	90	110			
Sample ID 1607562-001AMS	SampT	ype: MS	3	Tes	Code: El	PA Method	300.0: Anion	s		
Client ID: CP-1	Batch	ID: 264	145	R	tunNo: 3	5763				
Prep Date: 7/15/2016	Analysis D	ate: 7/	15/2016	S	eqNo: 1	106533	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.6	0.30	1.500	0.7127	60.9	15	110			
Chloride	18	1.5	15.00	3.380	94.7	70.8	119			
Nitrogen, Nitrite (As N)	2.8	0.30	3.000	0	92.8	71.5	113			
Bromide	7.0	0.30	7.500	0	93.3	81.1	111			
Nitrogen, Nitrate (As N)	8.2	0.30	7.500	0.8363	98.2	83.8	113			
Phosphorus, Orthophosphate (As P	8.4	1.5	15.00	0	55.9	15	105			
Sulfate	47	1.5	30.00	16.78	100	25.1	158			
Sample ID 1607562-001AMS	D SampT	ype: MS	D	Test	Code: El	PA Method	300.0: Anion	s		
Client ID: CP-1	Batch	ID: 264	145	RunNo: 35763						

Qualifiers:

Analyte

Fluoride

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Prep Date: 7/15/2016

H Holding times for preparation or analysis exceeded

Analysis Date: 7/15/2016

PQL

0.30

SPK value SPK Ref Val

0.7127

1.500

Result

1.6

ND Not Detected at the Reporting Limit

RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

LowLimit

15

Units: mg/Kg

110

%RPD

4.62

HighLimit

Value above quantitation range

Analyte detected below quantitation limits

SeqNo: 1106534

%REC

56.0

Sample pH Not In Range

Page 6 of 11

RPDLimit

20

Qual

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607562

28-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID 1607562-001AMSD	SampTy	ype: MS	SD	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: CP-1	Batch	ID: 26	445	R	RunNo: 3	5763				
Prep Date: 7/15/2016	Analysis Da	ate: 7/	15/2016	S	SeqNo: 1	106534	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	18	1.5	15.00	3.380	94.6	70.8	119	0.130	20	
Nitrogen, Nitrite (As N)	2.8	0.30	3.000	0	94.9	71.5	113	2.16	20	
Bromide	7.1	0.30	7.500	0	95.1	81.1	111	1.88	20	
Nitrogen, Nitrate (As N)	8.3	0.30	7.500	0.8363	99.8	83.8	113	1.37	20	
Phosphorus, Orthophosphate (As P	9.2	1.5	15.00	0	61.5	15	105	9.57	20	
Sulfate	44	1.5	30.00	16.78	91.7	25.1	158	5.62	20	

Qualifiers:

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

Page 7 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607562

28-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID LCS-26377

SampType: LCS

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

62.6

Client ID: LCSS

Batch ID: 26377

RunNo: 35683

Prep Date: 7/13/2016

Analysis Date: 7/14/2016

SeqNo: 1105643

Units: mg/Kg

Analyte Diesel Range Organics (DRO) Sur: DNOP

Result 51

Result

PQL SPK value SPK Ref Val 10 50.00

%REC LowLimit 101

HighLimit

124

RPDLimit Qual

4.7

94.1

70 130

%RPD

Sample ID MB-26377

SampType: MBLK

RunNo: 35683

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

%RPD

Client ID: **PBS** Prep Date: 7/13/2016

Batch ID: 26377 Analysis Date: 7/14/2016

PQL

SeqNo: 1105644

Units: mg/Kg

HighLimit

Diesel Range Organics (DRO)

ND

10.00

5.000

91.1

70

LowLimit

RPDLimit Qual

Surr: DNOP

10 9.1

SPK value SPK Ref Val %REC

130

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

RPD outside accepted recovery limits

% 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 8 of 11

Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607562

28-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26374

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

80

Client ID:

PBS

Batch ID: 26374

PQL

5.0

RunNo: 35744

Prep Date: 7/13/2016

Analysis Date: 7/15/2016

SeqNo: 1105954

%RPD

Result

ND

970

26

Result

Units: mg/Kg **HighLimit**

RPDLimit

Gasoline Range Organics (GRO) Surr: BFB

1000

25.00

1000

23.34

933.7

96.9

SPK value SPK Ref Val %REC LowLimit

120

Sample ID LCS-26374

Prep Date: 7/13/2016

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 26374

RunNo: 35744

HighLimit

LowLimit

LowLimit

59.3

59.3

80

80

80

80

Analyte Gasoline Range Organics (GRO)

Result

Analysis Date: 7/15/2016

%REC

SPK value SPK Ref Val %REC

0

SPK value SPK Ref Val

SeqNo: 1105955

104

108

Units: mg/Kg

120

120

%RPD

RPDLimit Qual

Qual

Qual

Surr: BFB

1100

TestCode: EPA Method 8015D: Gasoline Range

Client ID: CP-1

Sample ID 1607562-001AMS

SampType: MS Batch ID: 26374

POL

5.0

RunNo: 35744

Units: mg/Kg

Prep Date: 7/13/2016 Analyte

Analysis Date: 7/15/2016

PQL

SeqNo: 1105970

104

110

HighLimit %RPD **RPDLimit**

Gasoline Range Organics (GRO) Surr: BFB

Sample ID 1607562-001AMSD

24 47 1000

0

TestCode: EPA Method 8015D: Gasoline Range

143

120

Client ID:

SampType: MSD Batch ID: 26374

RunNo: 35744

Prep Date: 7/13/2016

Analysis Date: 7/15/2016

1100

SeqNo: 1105971

HighLimit

Analyte Gasoline Range Organics (GRO)

Surr: BFB

Result **PQL** 25 5.0

SPK value SPK Ref Val 25.00 1000

%REC LowLimit 100

109

Units: mg/Kg

143

120

%RPD **RPDLimit**

3.07 20 0 0

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND R RPD outside accepted recovery limits
- % 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

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

Hall Environmental Analysis Laboratory, Inc.

0.97

0.99

3.0

0.98

0.050

0.050

0.10

1.000

1.000

3.000

1.000

WO#: 1607562

28-Jul-16

Client:

APEX TITAN

Project:

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

Trunk MD 16" Hydro

Sample ID MB-26374	SampType	e: MBLK	Test	tCode: EF		,			
Client ID: PBS	Batch ID	D: 26374	R	RunNo: 35744					
Prep Date: 7/13/2016	Analysis Date	e: 7/15/2016	S	SeqNo: 11	105992	Units: mg/K	g		
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	ND 0	0.025							
Т э	ND 0	0.050							
Ethylbenzene	ND 0	0.050							
Xylenes, Total	ND	0.10							
Surr: 4-Bromofluorobenzene	0.94	1.000		93.6	80	120			
Sample ID LCS-26374	SampType	e: LCS	Test	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch ID	D: 26374	R	RunNo: 38	5744				
Prep Date: 7/13/2016	Analysis Date	e: 7/15/2016	S	SeqNo: 11	105993	Units: mg/K	g		
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	0.99 0	0.025 1.000	-	99.0		123			

0

0

0

97.1

99.4

98.5

80

82.8

83.9

124

121

122

120

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % 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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 10 of 11

H ll Environmental Analysis Laboratory, Inc.

WO#:

1607562

28-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16" Hydro

Sample ID MB-26385	SampTyp	e: MBLK	TestCode: EPA Method 6010B: Soil Metals					
Client ID: PBS	Batch II	D: 26385	RunNo:	35691				
Prep Date: 7/13/2016	Analysis Date	e: 7/14/2016	SeqNo:	1104223	Units: mg/Kg	I		
Analyte	Result	PQL SPK value	e SPK Ref Val %RE	C LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	25						
Magnesium	ND	25						
Potassium	ND	50						
Sodium	ND	25						
Sample ID LCS-26385	SampTyp	e: LCS	TestCode:	EPA Method	6010B: Soil M	etals		
Client ID: LCSS	Batch II	D: 26385	RunNo:	35691				

Sample ID LCS-26385	SampType: LCS TestCode: EPA Method 6010B: Soil Metals								
Client ID: LCSS	Batch ID: 26	385	R	RunNo: 35691					
Prep Date: 7/13/2016	Analysis Date: 7/	14/2016	S	eqNo: 1	104224	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	2400 25	2500	0	95.7	80	120			
Magnesium	2300 25	2500	0	94.0	80	120			
Potassium	2300 50	2500	0	90.6	80	120			
Sodium	2400 25	2500	0	94.3	80	120			

Sample ID	1607562-001AMS	SampT	ype: MS	3	Tes	TestCode: EPA Method 6010B: Soil Metals					
Client ID:	CP-1	Batch ID: 26385 RunNo: 35691									
Prep Date:	7/13/2016	Analysis D	alysis Date: 7/14/2016 SeqNo: 1104238 Units: mg/Kg								
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium		4100	50	2493	1928	85.7	75	125			
Magnesium		3300	50	2493	1052	90.0	75	125			
Potassium		2800	100	2493	730.2	83.9	75	125			
Sodium		2200	50	2493	40.04	87.7	75	125			

Sample ID	1607562-001AMSD	SampTy	SampType: MSD TestCode: EPA Method 6010B: Soil Metals							- 1	
Client ID:	CP-1	Batch	ID: 26	385	R	RunNo: 35691					
Prep Date:	7/13/2016	Analysis Da	ite: 7/	14/2016	S	eqNo: 1	104239	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium		4100	50	2476	1928	87.5	75	125	0.773	20	
Magnesium		3300	50	2476	1052	91.6	75	125	0.740	20	
Potassium		2900	99	2476	730.2	87.0	75	125	2.20	20	
Sodium		2100	50	2476	40.04	84.3	75	125	4.56	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 11 of 11

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



tiau Environmeniai Anulysis Luouruury 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

EL: 303-343-39/3 FAX: 303-343-410/ Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: APEX AZTE	C Work Order Numbe	r: 1607562		RcptNo:	1
Received by/date:	07/2/16				
Logged By: Lindsay Ma		1	Of SHED		
Completed By: Lindsay Ma	ingin 7/13/2016 8:36:24 AN	4	ALMED .		
Reviewed By:	2 07/13/10		000		
Chain of Custody	3 0 1/1 1/16				
1. Custody seals intact on sa	mple bottles?	Yes 🗌	No 🗆	Not Present	
2. Is Chain of Custody compl	ete?	Yes 🗹	No 🗆	Not Present	
3. How was the sample delive	ered?	Courier			
<u>Log in</u>					
4. Was an attempt made to d	cool the samples?	Yes 🗹	No 🗆	NA 🗆	
5. Were all samples received	at a temperature of >0° C to 6.0°C	Yes 🗹	No 🗆	NA 🗆	
6. Sample(s) in proper conta	iner(s)?	Yes 🗸	No 🗆		
7. Sufficient sample volume f	for indicated test(s)?	Yes 🗹	No 🗆		
8. Are samples (except VOA	and ONG) properly preserved?	Yes 🗹	No 🗆	_	
9. Was preservative added to	bottles?	Yes	No 🗹	NA 🗆	
10.VOA vials have zero heads	space?	Yes	No 🔲	No VOA Vials	
11. Were any sample containe	ers received broken?	Yes	No 🗹	# of owner and	
12. Does paperwork match bo		Yes 🗹	No 🗆	# of preserved bottles checked for pH:	>12 unless noted)
(Note discrepancies on cha 13. Are matrices correctly iden		Yes 🗸	No 🗆	Adjusted?	212 diless noted)
14. Is it clear what analyses w	·	Yes 🗹	No 🗆		
15. Were all holding times able (If no, notify customer for a	e to be met?	Yes 🗹	No 🗆	Checked by:	
Special Handling (If app					
16. Was client notified of all di	screpancies with this order?	Yes	No 🗆	NA 🗹	
Person Notified: By Whom:	Date Via:	□ eMail □	Phone Fax	☐ In Person	
Regarding:					
Client Instructions:					
17. Additional remarks:		¥			
18. Cooler Information Cooler No Temp °C 1 1.0	Condition Seal Intact Seal No Good Yes	Seal Date	Signed By		

				CHAIN OF CUSTODY RECORD
Proj. No. Project Name	Laboratory: Hall E Address: Albugi Contact: A.Fr Phone: PO/SO#: Sampler's Signature	uqul,NM	SUS BIEN AMING AMI	Lab use only Due Date: Temp. of coolers when received (C°): 1 2 3 4 5 Page 0 of 0
Trunkmo	16" Hyaro	1779///		
Matrix Date Time C G I I Identifying Mari	ks of Samble(s)	VOA A/G 1.1. 250 ml Glasss Jer P/O		Lab Sample ID (Lab Use Only)
9 711/16 1230 CP-		1	XXXX	1607562-001
3 1 1240 CP-		1	XXXX	-002
S 1250 CP-	3	1	XXXX	-002
S Y 1300 CP-	4	1	XXXX	-03
5 V 1310 Ep	5		XXXX	-005
	MES			
	50% Rush 196% Rush ime: Received by: (Signa	ture) Date:	Time: NOTES:	
Cont Julies 17/11/16 16	15 / /mi	1/2 b7/12/A	6 0750 Bill to	Tom Ling
Relinquished by (Signature) Date: T	ime: Received by: (Signa	ture) Date:	Time:	-700
Relinquished by (Signature) Date: T	ime: Received by: (Signa	ture) Date:	Time:	
Relinquished by (Signature) Date: T	ime: Received by: (Signa	ture) Date:	Time:	
Matrix WW - Wastewater W - Water S Container VOA - 40 ml vial A/G - Amber / Or	- Soil SD - Soild L - Liquid Glass 1 Liter 250 ml -	d A - Air Bag C - Cha Glass wide mouth P/O - Pl	rcoal tube SL - sludge O - Oil	



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

July 28, 2016

Kyle Summers

APEX TITAN

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Trunk MD 16"

OrderNo.: 1607561

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/12/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to 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

Lab Order 1607561

Date Reported: 7/28/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: Rupture #8

Project:

Trunk MD 16"

Collection Date: 7/9/2016 12:00:00 PM

Lab ID: 1607561-001

Matrix: AQUEOUS

Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst	pmf
Mercury	ND	0.00020		mg/L	1	7/15/2016 10:27:28 AM	26407
EPA 6010B: TOTAL RECOVERABLE	METALS					Analyst:	MED
Arsenic	ND	0.020		mg/L	1	7/15/2016 10:28:02 AM	26413
Barium	0.25	0.020		mg/L	1	7/21/2016 11:47:16 AM	
Cadmium	ND	0.0020		mg/L	1	7/15/2016 10:28:02 AM	26413
Chromium	ND	0.0060		mg/L	1	7/15/2016 10:28:02 AM	26413
Lead	0.0066	0.0050		mg/L	1	7/19/2016 8:10:40 AM	26413
Selenium	ND	0.050		mg/L	1	7/15/2016 10:28:02 AM	26413
Silver	ND	0.0050		mg/L	1	7/15/2016 10:28:02 AM	26413
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
Benzene	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
Toluene	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
Ethylbenzene	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
Methyl tert-butyl ether (MTBE)	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
1,2,4-Trimethylbenzene	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
1,3,5-Trimethylbenzene	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
1,2-Dichloroethane (EDC)	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A356
1,2-Dibromoethane (EDB)	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A356
Naphthalene	ND	2.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
1-Methylnaphthalene	ND	4.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
2-Methylnaphthalene	ND	4.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
Acetone	ND	10		μg/L	1	7/15/2016 12:12:00 AM	A3569
Bromobenzene	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
Bromodichloromethane	6.6	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
Bromoform	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
Bromomethane	ND	3.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
2-Butanone	ND	10		μg/L	1	7/15/2016 12:12:00 AM	A3569
Carbon disulfide	ND	10		μg/L	1	7/15/2016 12:12:00 AM	A3569
Carbon Tetrachloride	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
Chlorobenzene	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
Chloroethane	ND	2.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
Chloroform	47	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
Chloromethane	ND	3.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
2-Chlorotoluene	ND	1.0		µg/L	1	7/15/2016 12:12:00 AM	A3569
4-Chlorotoluene	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
cis-1,2-DCE	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A3569
cis-1,3-Dichloropropene	ND	1.0		μg/L	1	7/15/2016 12:12:00 AM	A356
1,2-Dibromo-3-chloropropane	ND	2.0		μg/L	1	7/15/2016 12:12:00 AM	A3569

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 7
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1607561

Date Reported: 7/28/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: Rupture #8

Project: Trunk MD 16"

Collection Date: 7/9/2016 12:00:00 PM

Lab ID: 1607561-001

Matrix: AQUEOUS

Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	DJF
Dibromochloromethane	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
Dibromomethane	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,2-Dichlorobenzene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,3-Dichlorobenzene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,4-Dichlorobenzene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
Dichlorodifluoromethane	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,1-Dichloroethane	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,1-Dichloroethene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,2-Dichloropropane	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,3-Dichloropropane	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
2,2-Dichloropropane	ND	2.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,1-Dichloropropene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
Hexachlorobutadiene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
2-Hexanone	ND	10	μg/L	1	7/15/2016 12:12:00 AM	A35696
Isopropylbenzene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
4-Isopropyltoluene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
4-Methyl-2-pentanone	ND	10	μg/L	1	7/15/2016 12:12:00 AM	A35696
Methylene Chloride	ND	3.0	μg/L	1	7/15/2016 12:12:00 AM	A3569
n-Butylbenzene	ND	3.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
n-Propylbenzene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
sec-Butylbenzene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A3569
Styrene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A3569
tert-Butylbenzene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
trans-1,2-DCE	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,1,1-Trichloroethane	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
1,1,2-Trichloroethane	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
Trichloroethene (TCE)	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
Trichlorofluoromethane	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
1,2,3-Trichloropropane	ND	2.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Vinyl chloride	ND	1.0	μg/L	1	7/15/2016 12:12:00 AM	A35696
Xylenes, Total	ND	1.5	μg/L	1	7/15/2016 12:12:00 AM	A35696
IS: 1,4-Dichlorobenzene-d4	10	0		1	7/15/2016 12:12:00 AM	A35696
IS: Chlorobenzene-d5	10	0		1	7/15/2016 12:12:00 AM	A35696

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 7
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1607561

Date Reported: 7/28/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Trunk MD 16"

Lab ID: 1607561-001 Client Sample ID: Rupture #8

Collection Date: 7/9/2016 12:00:00 PM

Received Date: 7/12/2016 7:50:00 AM Matrix: AQUEOUS

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	st: DJF
IS: Pentafluorobenzene	10	0		1	7/15/2016 12:12:00 A	M A35696
Surr: 1,2-Dichloroethane-d4	96.8	70-130	%Rec	1	7/15/2016 12:12:00 Al	M A35696
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	7/15/2016 12:12:00 Al	M A35696
Surr: Dibromofluoromethane	99.9	70-130	%Rec	1	7/15/2016 12:12:00 Al	M A35696
Surr: Toluene-d8	99.1	70-130	%Rec	1	7/15/2016 12:12:00 Al	M A35696

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
- RPD outside accepted recovery limits
- % 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 3 of 7 J

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

Hall Environmental Analysis Laboratory, Inc.

SampType: LCS

WO#:

1607561 28-Jul-16

Client:

Sample ID 100ng Ics2

APEX TITAN

Project:

Trunk MD 16"

Client ID: LCSW	Batch	n ID: A3	5696	F	RunNo: 3	5696							
Prep Date:	Analysis D	ate: 7/	14/2016	8	SeqNo: 1105190								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	48	1.0	47.00	0	102	70	130						
Toluene	48	1.0	47.00	0	101	70	130						
Chlorobenzene	47	1.0	47.00	0	100	70	130						
1,1-Dichloroethene	49	1.0	47.00	0	104	70	130						
Trichloroethene (TCE)	45	1.0	47.00	0	96.7	70	130						
IS: 1,4-Dichlorobenzene-d4	10	0											
IS: Chlorobenzene-d5	10	0											
IS: Pentafluorobenzene	10	0											
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130						
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130						
Surr: Dibromofluoromethane	9.7		10.00		96.9	70	130						
Surr: Toluene-d8	9.6		10.00		96.1	70	130						
Sample ID rb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260B: VOL	ATILES					

TestCode: EPA Method 8260B: VOLATILES

Client ID: PBW Batch ID: A35696 RunNo: 35696

Prep Date: Analysis Date: 7/14/2016 SeqNo: 1105199 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % 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 J
- Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 4 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607561

28-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16"

Sample ID rb	SampT	ype: MB	LK	TestCode: EPA Method 8260B: VOLATILES											
Client ID: PBW	Batch	ID: A35	5696	R	RunNo: 3	5696									
Prep Date:	Analysis D	ate: 7/1	14/2016	S	SeqNo: 1	105199	Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Chloroform	ND	1.0													
Chloromethane	ND	3.0													
2-Chlorotoluene	ND	1.0													
4-Chlorotoluene	ND	1.0													
cis-1,2-DCE	ND	1.0													
cis-1,3-Dichloropropene	ND	1.0													
1,2-Dibromo-3-chloropropane	ND	2.0													
Dibromochloromethane	ND	1.0													
Dibromomethane	ND	1.0													
1,2-Dichlorobenzene	ND	1.0													
1,3-Dichlorobenzene	ND	1.0													
1,4-Dichlorobenzene	ND	1.0													
Dichlorodifluoromethane	ND	1.0													
1,1-Dichloroethane	ND	1.0													
1,1-Dichloroethene	ND	1.0													
1,2-Dichloropropane	ND	1.0													
1,3-Dichloropropane	ND	1.0													
2,2-Dichloropropane	ND	2.0													
1,1-Dichloropropene	ND	1.0													
Hexachlorobutadiene	ND	1.0													
2-Hexanone	ND	10													
Isopropylbenzene	ND	1.0													
4-Isopropyltoluene	ND	1.0													
4-Methyl-2-pentanone	ND	10													
Methylene Chloride	ND	3.0													
n-Butylbenzene	ND	3.0													
n-Propylbenzene	ND	1.0													
sec-Butylbenzene	ND	1.0													
Styrene	ND	1.0													
tert-Butylbenzene	ND	1.0													
1,1,1,2-Tetrachloroethane	ND	1.0													
1,1,2,2-Tetrachloroethane	ND	2.0													
Tetrachloroethene (PCE)	ND	1.0													
trans-1,2-DCE	ND	1.0													
trans-1,3-Dichloropropene	ND	1.0													
1,2,3-Trichlorobenzene	ND	1.0													
1,2,4-Trichlorobenzene	ND	1.0													
1,1,1-Trichloroethane	ND	1.0													
1,1,2-Trichloroethane	ND	1.0													

Qualifiers:

- 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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

20

Page 5 of 7

Hall Environmental Analysis Laboratory, Inc.

9.7

WO#:

1607561

28-Jul-16

Client:

APEX TITAN

Project:

Surr: Toluene-d8

Trunk MD 16"

Sample ID rb TestCode: EPA Method 8260B: VOLATILES SampType: MBLK Client ID: **PBW** Batch ID: A35696 RunNo: 35696 Prep Date: Analysis Date: 7/14/2016 SeqNo: 1105199 Units: µg/L Analyte SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Result **PQL** HighLimit Qual Trichloroethene (TCE) ND 1.0 Trichlorofluoromethane ND 1.0 ND 2.0 1,2,3-Trichloropropane ND 1.0 Vinyl chloride ND Xylenes, Total 1.5 IS: 1,4-Dichlorobenzene-d4 10 0 10 0 IS: Chlorobenzene-d5 IS: Pentafluorobenzene 10 0 Surr: 1,2-Dichloroethane-d4 10.00 103 70 130 10 Surr: 4-Bromofluorobenzene 10 10.00 101 70 130 Surr: Dibromofluoromethane 10 10.00 99.8 70 130

96.6

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 6 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#:

1607561

28-Jul-16

Client:

APEX TITAN

Project:

Trunk MD 16"

Sample ID MB-26407

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Client ID:

PBW

Batch ID: 26407

RunNo: 35726

Prep Date: 7/14/2016

Sample ID LCS-26407

Client ID: LCSW

Analysis Date: 7/15/2016

SeqNo: 1105600

Units: mg/L **HighLimit**

%RPD **RPDLimit**

Qual

Analyte Mercury

ND 0.00020

TestCode: EPA Method 7470: Mercury

SPK value SPK Ref Val %REC LowLimit

0

SampType: LCS

PQL

%RPD

Batch ID: 26407

RunNo: 35726

Prep Date: 7/14/2016

Result

Analysis Date: 7/15/2016

SeqNo: 1105601

Units: mg/L

120

Analyte Mercury

PQL 0.0052 0.00020

SPK value SPK Ref Val 0.005000

%REC LowLimit 103

HighLimit

RPDLimit

Qual

Sample ID 1607561-001BMS

SampType: MS

TestCode: EPA Method 7470: Mercury

Client ID:

Prep Date:

Rupture #8 7/14/2016

Batch ID: 26407

RunNo: 35726

SeqNo: 1105603

80

Units: mg/L

125

Analyte Mercury

Result 0.0056 0.00020

Analysis Date: 7/15/2016

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

0.005000 0.0001126

109

HighLimit

%RPD **RPDLimit**

Qual

Client ID:

Sample ID 1607561-001BMSD

SampType: MSD

Analysis Date: 7/15/2016

TestCode: EPA Method 7470: Mercury

RunNo: 35726

Prep Date:

Rupture #8 7/14/2016

Batch ID: 26407

SeqNo: 1105604

Units: mg/L **HighLimit**

Qual

Analyte Mercury

Result

SPK value SPK Ref Val **PQL** 0.0056 0.00020 0.005000 0.0001126

%REC 110

LowLimit

75

125

%RPD 0.599 **RPDLimit** 20

Page 7 of 7

Oualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Н

% Recovery outside of range due to dilution or matrix

- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

- 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
- Sample container temperature is out of limit as specified

RI. Reporting Detection Limit



LIGHT LATER OF UNITERIOR ASSESSMENT AS LANDOT GROUP Y

4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

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

Albuquerque, NM 87109 Sample Log-In Check List

Received by/date:	
1. Custody seals intact on sample bottles? 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In 4. Was an attempt made to cool the samples? Yes V No No Not Present C	
2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In 4. Was an attempt made to cool the samples? Yes ✓ No No Not Present □ No Not Present □ No Not Present □ No Not Present □ No In Not Present □ Not In Not Present □ Not In	
3. How was the sample delivered? Log In 4. Was an attempt made to cool the samples? Yes V No No NA NA NA NA NA NA NA	
Log In 4. Was an attempt made to cool the samples? Yes ✓ No □ NA □ 5. Were all samples received at a temperature of >0° C to 6.0°C Yes ✓ No □ NA □	
4. Was an attempt made to cool the samples? Yes ✓ No □ NA □ NA □ NA □ NA □	
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ✓ No □ NA □	
6. Sample(s) in proper container(s)? Yes ✓ No □	
7. Sufficient sample volume for indicated test(s)? Yes ☑ No □	
8. Are samples (except VOA and ONG) properly preserved? Yes ✓ No □	
9. Was preservative added to bottles? Yes □ No ☑ NA □	
10.VOA vials have zero headspace? Yes ✓ No No VOA Vials ☐	
11. Were any sample containers received broken? Yes ☐ No ☑ # of preserved	
12. Does paperwork match bottle labels? Yes V No D bottles checked for pH:	inless noted)
13. Are matrices correctly identified on Chein of Custody? Yes No Adjusted?	
14. Is it clear what analyses were requested? Yes ☑ No ☐	4
15. Were all holding times able to be met? (If no, notify customer for authorization.)	2
Special Handling (if applicable)	
16. 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:	
17. Additional remarks:	
18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 1 1.0 Good Yes	

																					'IIXII	UF	CUSTODY H	ECOUD
Office Location 72 76 C Cor Pho Project Manager PO Sampler's Name Samp						Contact: #Phone: PO/SO #: Sampler's Sign	Address: ABR Contact: AND FRAMON Phone: PO/SO#: Implieds Signature						Rec	ALYSIS	ED/							Lab use only Due Date: Temp. of coolers when received (0 1 2 3 Page 0		
Proj. N	lo.		Proje	oct Na	ink M	0 16"	,		No/Ty	pe of C	Contain	ers		8261	CRA			//	/ /	/				
Matrix	Date	Time	COED	Grab	Identifying Mar	rks of Sample(s)		End		AG TE	250 ml	Glass	9/0	8	1 PC	//	//					Lab S	Sample ID (Lab Use	Only)
W	7/9/16	1200		X	Rupt	ure#8			3				1	X,	k						16	0,	F61-C	01
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Relino	uished by	(Signature)			Date:	Time: Receiv	ed by:	(Signa	tture)			Date	:	Tin	ne:									
Matrix Contain		W - Wastewa DA - 40 ml vis			W - Water S A/G - Amber / O	S - Soil SD - So	lid I	Liqui 250 ml -	d A Glass v	- Air Ba	ag outh			rcoal tul		slud	ige	0-	Oil					