3R-1011

Release Report/ General Correspondence

Enterprise SJ

Trunk MD 16 Inch 2016

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

State of New Mexico Energy Minerals and Natural Resources

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.

	Santa Fe, NM 87505												
	Release Notificat						tion and Corrective Action						
					0	PERATO	ર] Initial	Report	\boxtimes	Final Report	
Name of C							nomas Long						
Address: 6				87401			No. 505-599-2						
Facility Na	me: Irunk	MD 16 Inc	h			Facility Typ	e: Natural Ga	s Pipe	eline				
Surface Ov	vner: BLM			Mineral Ov	vnei	BLM			Serial	Number:			
				LOCAT	ΓΙΟ	N OF REL	EASE						
Unit Letter M	Section 1	Township 29N	Range 11W	Feet from the 1185	Nor	e e	Feet from the 1361	East/ Line	West	County San Juar	n		
			La	atitude <u>36.75</u>	053	4_Longitud	e <u>-107.94731</u> (0					
				NATU	IRE	OF RELI							
Type of Rele	-					1,113 barre	elease Estimate Is of potable wa	ater		Recovered			
Source of R			ne			6/16/2016 @			6/16/201	d Hour of D 16 @ 6:30 p	o.m.		
Was Immed	iate Notice			Not		14 11 1 10	hom? Courtesy						
Required						Nathenna D	emer ne June 16, 201 me				DIST	1.3	
By Whom?	Thomas Lo	ng				Date and Ti	me June 16, 201	16@8	3:55 p.m.	CONS. DI			
Was a Wate	rcourse Re		_	_		If YES, Volu	me		-10	NOV 28	1 5010		
	🛛 Yes 🗌 No									NON			
	atercourse was Impacted, Describe Fully.* Approximatel south entering an ephemeral wash and continued a flow								eased to	the ground	surface	e and	
							on June 16, 2016		pture occu	urred during	hydro	-static	
testing of the	e Trunk MD	16 Inch pipe	eline. Appr	oximately 1,113	3 bar	rels of potabl	e water was rele						
entering an	epnemeral	wash and co	ntinued a	flowing south fo	r ap	proximately 0	.5 miles.						
							rom the source a						
with NMOCI included with			lection. A	nalytical results	indi	cate no enviro	onmental impact.	. A thi	ird party c	corrective ac	ction re	port is	
Included with		. 0-141.											
I hereby cer	tify that the	information of	niven aboy	e is true and co	mol	ete to the hes	t of my knowledg	no and	undoreta	nd that nur	suant t	NMOCD	
rules and reg	gulations all	operators a	re require	d to report and/o	or file	e certain relea	ase notifications	and pe	erform cor	rective actio	ons for	releases	
which may e	ndanger pu	blic health o	r the envir	onment. The a	ccep	tance of a C-	141 report by the	e NMC	CD mark	ed as "Final	I Repo	rt" does not	
around wate	r. surface	ability should	a their ope health or	the environmen	iea t it. Ir	o adequately addition. NM	investigate and	remed	C-141 rei	mination th	at pose	e a threat to	
	I water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the or of responsibility for compliance with any other federal, state, or local laws and/or regulations.												
Signature:	Chu	8 fm	11				OIL CONS	SER	TATION	I DIVISIC	2N		
olghatare.	111												
Printed Nam	Printed Name: Jon E. Fields Approved				Approved by	Environmental	Specia	list	Xa	en	2		
Title: Directo	or, Field Env	vironmental				Approval Da	te:9/20/201	10	Expiration	Date:			
E-mail Addre	ess:jefields(@eprod.com				Conditions of	f Approval:				. —		
	11				_					Attached			
Date: K	ate: 10/10/2011 Phone: (713)381-6684					NVFILILITZZZY							

Oil Conservation Division

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

1220 S. St. Francis Dr., Santa Fe, NM 87505 1220 South St. Francis Dr. Santa Fe, NM 87505													
Release Notification and Corrective Action													
						PERATO			Г	Initial F	Report	\boxtimes	Final Repor
Name of Con	npany: I	Enterprise F	ield Serv	rices LLC	Contact: Thomas Long							·	
Address: 614				87401		Telephone No. 505-599-2286							
Facility Name	e: Trunk	MD 16 Inc	h			Facility Type: Natural Gas Pipeline							
Surface Own	er: BLM			Mineral O	wne	wner:BLM Serial Number:							
				LOCA	τιο	N OF REI	EAS	E					
Unit Letter S	Section 1	Township 29N	Range 11W	Feet from the 126	No	North SouthFeet from the 684East Vest LineCounty San Juan							
			La	atitude <u>36.74</u>	777	<u>′0</u> _Longitud	le <u>-107</u>	.94961	<u>6</u>				
				NATU	JRE	OF REL	EASE						
Type of Release	se: Hydro	Static Test	Vater			Volume of F 120 barrels				Volume F	Recovered	: Non	e
Source of Rele	ease: Rup	otured Pipelir			Date and He 6/19/2016 @			ce:		Hour of D		ery:	
Was Immediat	e Notice		Not		If YES, To V Katherina D			y Notific	cation – Va	inessa Fie	lds, N	MOCD;	
Required Date and Time June 19, 2016 @ 1:35 p.m.													
Was a Watercourse Reached? If YES, Volume													
If a Watercours										ased to the	ground s	urface	and flowed
south entering Describe Caus testing of the T entering an ep	se of Prot Frunk MD	blem and Rer 16 Inch pipe	nedial Act line. Appr	ion: At approxi oximately 120	mate barre	ely 6:30 p.m., els of potable	on June water w	19, 201 as relea	16, a ru				
Describe Area 2016 with NMC is included with	OCD with	essing samp											
I hereby certify rules and regu which may end relieve the ope ground water, operator of res	lations al danger pu erator of li surface w	l operators a ublic health o ability should vater, human	re required r the envir I their ope health or	d to report and/ onment. The a rations have fa the environme	or fil accep iled nt. 1	e certain relea ptance of a C to adequately n addition, NN	ase noti -141 rep investig /IOCD a aws and	fications ort by th gate and cceptan /or regu	and pene NMC remedice of a lations.	erform corr CD marke iate contar C-141 rep	ective acti ed as "Fina mination th ort does n	ons fo Il Repe nat pos ot relie	r releases ort" does not se a threat to
Signature:	In	E. fu	4				OIL	CON	SER\	NOTPAN	DIVISI	NC	
Printed Name:	Jon E. F	ields				Approved by	y Enviro	nmenta	Specia		L	i	
Title: Director,	Field Env	vironmental				Approval Da	ate:Q	2/20	6	Expiration	Date:		
E-mail Address	s:jefields(@eprod.com	_			Conditions of	of Appro	val:			Attache	d 🗖	
Date: 10/	10/2016	ots If Nacas		e: (713)381-66	84	NVFI	617	148	434	0			

District I 1625 N. Frenc District II 811 S. First St District III 1000 Rio Braz District IV 1220 S. St. Fra	., Artesia, NN os Road, Azte	1 88210 ec, NM 87410 nta Fe, NM 875		Energ Oil C 1220 Sa	y Min Re onse Sout nta F		Natural ivision ncis Dr. 7505 Corrective							
Name of C	ompany:	Enterprise F	ield Ser	vices LLC		PERATO	homas Long	L		Report 🛛 F	inal Report			
		Ave, Farming				and the second sec	e No. 505-599	-2286						
		MD 16 Inc				Facility Ty	pe: Natural C	Gas Pip	eline					
Surface Ov	wner: State	e of NM		Mineral (Owner	State of	NM		Serial	Number: RW-23	639 141 1011			
14.				LOCA		N OF RE	LEASE	and a second			Tics			
Unit Letter J	Section 36	Township 30N	Range 11W	Feet from the 2280		theSouth	Feet from the 1520	East	West	County San Juan				
			I	_atitude_36	.7674:	3_Longitu	de -107.9389	93			80%4.5 8 % 9 8			
1 1 - 1 2 4				NAT	URE	OF REL	EASE				<i>1</i> 5			
		o-Static Test \				100 barrel	Release Estim s of potable w	ater		Recovered: None	- <u>1997</u>			
Source of R	elease: Rup	ptured Pipelin	ie				lour of Occurre @ 1:25 p.m.	nce:		d Hour of Discover 16 @ 1:25 p.m.	y:			
Was Immed Required	iate Notice	Given?	s 🗌 No	Not			Whom? Vanes	sa Fields			141 3811			
By Whom?	Thomas Lo	ong				Date and T	ime June 22, 2	2016@2	2:25 p.m.					
Was a Wate	ercourse Re		🛛 Yes	🗌 No		If YES, Vol	ume							
west enterin	g an ephen	neral wash ar	nd continu	ed a flowing w	west fo	r approxima	tely 0.50 miles			e ground surface a urred during hydro-				
testing of the	e Trunk MD	16 Inch pipe	line. Appr) barre	Is of potable	water was rele			d surface and flowe				
	D witnessing	g sample coll								the release on Jun rrective action repo				
rules and re which may e relieve the c ground wate	gulations al endanger pu perator of li er, surface w	ll operators ai ublic health or iability should vater, human	re require r the envir I their ope health or	d to report and conment. The rations have f the environme	d/or file accep failed to ent. In	e certain rele tance of a C adequatel addition, N	ease notification -141 report by y investigate ar	ns and per the NMC and remed ance of a	erform cor OCD mark liate conta C-141 rej	and that pursuant to rective actions for ed as "Final Report amination that pose port does not reliev	releases t" does not a threat to			
Signature:	Chi	C. F.	1							DIVISION	- (7.11			
Printed Nam	ne: Jon E. F	ields	· · · · ·			Approved b	y Environment	al Specia	alist:					
Title: Directo	or, Field Env	vironmental				Approval D	10.10		Expiration	Date:				
4		@eprod.com					of Approval:			Attached	1993 . 1993 . 19 19 -			
	10/2011 tional Shee	ets If Neces		e: (713)381-6	684	NVFIL	795438	5			20 s not			

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.

_				Sal									
		F	Releas	e Notifica	atio	tion and Corrective Action							
					0	OPERATOR Initial Report I Final Re							
Name of C	ompany: I	Enterprise F	Field Serv	ices LLC		Contact: T	nomas Long						
Address: 6	14 Reilly A	ve, Farmin	gton, NM				No. 505-599-2						
Facility Na	me: Trunk	MD 16 Inc	h			Facility Typ	e: Natural Ga	s Pipe	line				
Surface Ov	vner: BLM			Mineral O	wne	r: BLM			Serial I	Number:	SN 08	30782	
				LOCA	TIO	N OF REL	EASE						
Unit Letter L	Section 30	Township 30N	Range 11W	Feet from the 431	Lin	e South	Feet from the 1047	East Line	Vest	County San Jua	in		
			Li	atitude <u>36.78</u>	8871	6_Longitud	e_ <u>-107.93019</u>	9					
				NAT	URE	OF RELI	EASE						
Type of Rele	ease: Hydro	-Static Test	Water				elease Estimates of potable wat		Volume I	Recovered	: Non	e	
Source of R	elease: Rup	otured Pipelin	ne				our of Occurrence			Hour of [6 @ 3:06		ery:	
Was Immed	iate Notice		s 🗌 No	Not		If YES, To V	Vhom? Vanessa	Fields,	NMOCD;	Katherina	a Diem	ner, BLM	
Required													
By Whom?		-					me June 24, 20	16@6	:00 p.m.				
Was a Wate	rcourse Re		🛛 Yes	🗌 No	No If YES, Volume								
If a Waterco	urse was In	npacted, Des	scribe Full ash to the	y.* Approximat	ely 1	00 barrels of tinued a flowi	ootable water wa	as relea	sed to the	e ground s	urface	and flowed	
Describe Ca	use of Prob	olem and Re	medial Ac	tion: At approxi	imate	ly 3:06 p.m.,	on June 24, 201	6, a rup	ture occu	rred durin	g hydr	o-static	
							water was releasing south for app				and flo	wed	
30001100310	intering an e	sprioritional w		Southwest and			ig south of upp	i oximat	0.001	1100.			
	MOCD with	essing samp					from the source environmental in						
rules and re which may e relieve the o	gulations al endanger pu perator of li	l operators a ublic health o iability should	re require or the envir d their ope	d to report and ronment. The a rations have fa	and complete to the best of my knowledge and understand that pursuant to NMOCE rt and/or file certain release notifications and perform corrective actions for releases The acceptance of a C-141 report by the NMOCD marked as "Final Report" does n ave failed to adequately investigate and remediate contamination that pose a threat							or releases ort" does not se a threat to	
							IOCD acceptant		C-141 rep	ort does r	not reli	eve the	
		6	1		, 01	alle, et loour le	OIL CON		ATION	DIVISI	ON		
Signature:	In	. true						1	Y	K	5		
Printed Nam	e: Jon E. F	ields				Approved by	/ Environmental	Specia	list:	il	e	~>	
Title: Directo	or, Field Env	vironmental				Approval Da	te: 119120		Expiration	Date:			
E-mail Addr	ess:jefields(@eprod.com				Conditions of	of Approval:			Attache	d 🗆		
Date:	10/10/2014	6	Phon	e: (713)381-66	84	NUFILO	7952104				- L		

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.

			Santa Fe, NM 87505												
		F	leeas	e Notifica	atio	ion and Corrective Action									
					OF	PERATOR	2		Initial F	Report	\boxtimes	Final Report			
		Enterprise F					nomas Long								
Address: 6	14 Reilly A	ve, Farmin	gton, NM				No. 505-599-2								
Facility Na	me: Trunk	MD 16 Inc	h			Facility Typ	e: Natural Ga	as Pipe	eline						
Surface Ov	vner: BLM			Mineral O	wner	BLM			Serial N	Number:	SN 08	80782			
	_					N OF REL									
Unit Letter P	Section 18	Township 30N	Range 10W	Feet from the 1017	Nort Line	th/South	Feet from the 1218	East Line	West	County San Jua	n				
			La	atitude <u>36.80</u>	07101	Longitud	e_ <u>-107.92045</u>	8							
				NATURE OF RELEASE											
Type of Rele	ease: Hydro	-Static Test	Water				elease Estimat of potable wat		Volume F	Recovered	: Non	e			
Source of R	elease: Rup	otured Pipelir	ne			Date and Ho 6/30/2016 @	our of Occurrence 5:55 p.m.	ce:		Hour of D 6 @ 5:55		ery:			
Was Immed	iate Notice			Not		If YES, To W	/hom? Vanessa	a Fields,	, NMOCD;	Katherina	l Diem	er, BLM			
Required															
By Whom?	Thomas Lo	ng				Date and Tir	me June 30, 20	16@7	:00 p.m.						
Was a Wate	rcourse Re	ached?				If YES, Volu	me								
			Yes	🛛 No											
If a Waterco	urse was In	npacted, Des	cribe Full	V.*											
Describe Ca testing of the	ause of Prote Trunk MD	blem and Rei 16 Inch pipe	medial Act line. Appr	tion: At approxi			on June 30, 201 water was relea								
southwest a on July 1, 20	long the rig	ht-of-way for	approxim sing samp	ately 500 feet.	Enter	prise collecte	ble water was re d soil samples f dicate no enviro	from the	source a	nd flow pa	th of th	ne release			
rules and re which may e relieve the o ground wate	gulations al endanger pu perator of li er, surface v	l operators a ublic health o ability should vater, human	re require r the envir d their ope health or	above is true and complete to the best of my knowledge and understand that pursuant to NMOCE uired to report and/or file certain release notifications and perform corrective actions for releases environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does n operations have failed to adequately investigate and remediate contamination that pose a threat h or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the rith any other federal, state, or local laws and/or regulations.							r releases ort" does not se a threat to				
Signature:	In E. F. G					OIL CON	SERV	ATION	DIVISIO	NC					
Printed Nam	ne: Jon E. F	ields				Approved by	Environmental	Specia)					
Title: Directo	or, Field Env	vironmental			Approval Date: 19 207 Expiration Date:										
E-mail Addr	ess:jefields(@eprod.com				Conditions of	f Approval:			Attache	d 🗆				
Date:	0/10/2016		Phon	e: (713)381-66	84	NUEL	201945	224	5						

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

	Release Notification and Corrective Action												
		F				Actio	on						
					0	PERATO			Initial	Report	\boxtimes	Final Repor	
	ompany: En						nomas Long	0000					
	14 Reilly Ave			87401	_		No. 505-599- be: Natural Ga		line				
Facility Na	me: Trunk N	10 16 Inc	n			Facility Typ	e: Natural Ga	as Pipe	line				
Surface Ov	wner: BLM			Mineral O	wne	r: BLM			Serial Number: SN 080782				
						N OF REI	EASE						
Unit Letter B	Section T 19	Township 30N	Range 10W	Feet from the 1323	Lin	rth South e	Feet from the 2161	East Line	Vest	County San Jua	an		
			La				e_ <u>-107.92378</u>	<u> 86</u>					
		NATURE OF RELEASE											
Type of Rel	ease: Hydro-S	Static Test	Water			700 barrels	elease Estima of potable wa	ter	Volume	Recovere	d: Non	e	
Source of R	elease: Ruptu	red Pipelir	ne			Date and He 7/5/2016 @	our of Occurren 9:30 a.m.	ce:		d Hour of @ 9:30 a		ery:	
Was Immed	liate Notice Gi		_	_		If YES, To V	Vhom? Vaness	a Fields,	NMOCD	; Katherin	a Dien	ner, BLM	
Required Ves No Not													
By Whom? Thomas Long Date and Time July 5, 2016 @						6 @ 3:1	5 p.m.		8 4 10 -1 100 -				
Was a Wate	ercourse Reac	hed?			If YES, Volu	me							
	☐ Yes ⊠ No												
							ootable water w			e ground s	surface	and flowed	
							oproximately 1, on July 5, 2016			ed during	hydro-	static testing	
of the Trunk	MD 16 Inch p	pipeline. Ap	oproximate	ely 700 barrels	of po	otable was rel	eased to the gr	ound su	face and	flowed so	outhwe	st along the	
				flowed for appr									
		1.01											
							rom the source nmental impact						
	h this "Final" (,			internation interest		purty out		don ro		
I hereby cer	tify that the inf	formation g	given abov	e is true and c	ompl	lete to the bes	t of my knowled	dge and	understa	nd that pu	Irsuant	to NMOCD	
rules and re	gulations all o	perators a	re required	d to report and	/or fil	e certain relea	ase notifications	s and pe	rform cor	rective ac	tions fo	or releases	
		endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not perator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to											
	and water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the												
operator of	responsibility f	for complia	ince with a	iny other feder	al, st	ate, or local la	ws and/or regu						
Signature:	Chil	4 11					OIL CON	SERV	ATION	DIVIS	ON		
Signature.	JAN	Mul						$\land ($			2		
Printed Nan	ne: Jon E. Fiel	ds				Approved by	Environmenta	I Specia	list:	m	C	9	
Title: Directo	or, Field Enviro	onmental				Approval Da	te: 1119 20		Expiration	Date:			
E-mail Addr	ess:jefields@e	eprod.com				Conditions of	of Approval:						
	. /				Attached								
Date: 10	110/2015		Phone	e: (713)381-66	NVF1618848228								

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

State of New Mexico Energy Minerals and Natural Resources

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.

	Sania Fe, Nivi 07505												
		F	Releas	e Notifica	atic	tion and Corrective Action							
					0	OPERATOR Initial Report Fina							
		Enterprise I					homas Long						
		ve, Farmin		87401			No. 505-599-2						
Facility Na	me: Trunk	MD 16 Inc	h			Facility Type: Natural Gas Pipeline							
Surface Ov	vner: BLM			Mineral C	Owne	r: BLM			Serial	Number:	SN 08	80782	
						N OF REI		_					
Unit Letter P	Section 18	Township 30N	Range 10W	Feet from the 991	No Lin	rth/South	Feet from the 1263	East Line	West	County San Jua	an		
			La	titude <u>36.88</u>	3070	50 Longitu	de <u>-107.9205</u> 7	<u>'0</u>					
	NATURE OF REL						EASE						
Type of Rele	ease: Hydro	-Static Test	Water				Release Estimate		Volume	Recovered	d: Non	e	
Source of R	elease: Rup	otured Pipelii	ne				our of Occurrenc			d Hour of I @ 12:51		ery:	
Was Immed	iate Notice						Vhom? Vanessa	Fields				er, BLM	
Required	guired												
By Whom?	Thomas Lo	ng				Date and Ti	me July 8, 2016	@ 1:5	59 p.m.				
Was a Wate	a Watercourse Reached?					If YES, Volu	ime						
	🗌 Yes 🖾 No												
If a Waterco	urse was In	npacted, Des	scribe Full	y.*		<u> </u>							
Describe Ca	use of Prot	blem and Re	medial Act	tion: At approx	imate	ely 5:55 p.m.,	on June 30, 201 water was releas	6, a ru	pture occu	rred durin	g hydr	o-static	
				ately 500 feet.		eis of potable	water was releas	seu lo	the ground			weu	
	A.65	1.01			1001								
							ble was released ples from the sou						
2016 with N	MOCD with	essing samp	le collectio	on. Analytical	resul	ts indicate no	environmental ir	mpact.	A third pa	rty correct	tive act	ion report is	
included wit	h this "Final	" C-141.											
							st of my knowled						
							ase notifications						
							141 report by the investigate and						
ground wate	r, surface w	vater, human	health or	the environme	ent. I	n addition, NM	IOCD acceptance	ce of a	C-141 rep				
operator of	perator of responsibility for compliance with any other federal, state, or lo												
Signature:	An	14. free	61			OIL CONSERVATION DIVISION							
		1000	7										
Printed Nam	Printed Name: Jon E. Fields Approve					Approved by	/ Environmental	Specia	alist	inl	e	2	
Title: Directo	or, Field Env	vironmental				Approval Da	ite:1/19/201		Expiration	Date:			
E-mail Addr	ess:jefields(@eprod.com				Conditions of	of Approval:						
	11			/						Attache	ed 🗌		
Date:	Date: 10/10/2014 Phone: (713)381-6684					NVF1621727535							

Date:

* Attach Additional Sheets If Necessary

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

Oil Conservation Division 1220 South St. Francis Dr. Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Santa Fe, NM 87505 **Release Notification and Corrective Action**

			Cicas			PERATO			_	Report	\boxtimes	Final Report		
Name of C	ompany:	Enterprise F	ield Serv	ices LLC		Contact: Thomas Long								
		ve, Farmin					No. 505-599-2	2286						
		MD 16 Inc				Facility Typ	e: Natural Ga	s Pipe	eline					
Surface Ov	wner: BLM			Mineral (Owne	r: BLM			Serial	Number:	SN 08	0782		
						N OF REL					8			
Unit Letter B	Section 19	Township 30N	Range 10W	Feet from the 1193	Lin	rth South e	Feet from the 2118	East Line	West	County San Jua	n			
			La			0_Longitud	e <u>-107.92366</u>	<u>0</u>						
Type of Rele	ease: Hydro	-Static Test	Water	INAI	UKE	Volume of R	elease Estimat		Volume	Recovered	: None	•		
Source of R	elease: Rup	otured Pipelir	ne			Date and Ho 7/9/2016 @	our of Occurrence 9:45 a.m.	ce:	7/9/2016	d Hour of D @ 9:45 a.	.m.	-		
Was Immed	iate Notice		s 🗌 No	Not		If YES, To V	hom? Vanessa	i Fields	, NMOCD	; Katherina	Dieme	er - BLM		
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of the Trunk	MD 16 Incl	h pipeline. Ap	oproximate	ly 600 barrels	s of po		on July 9, 2016, ras released to t ly 1,500 feet.							
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Printed Nam	ne: Jon E. F	ields				Approved by	Environmental	Specia	alist.	ant	5			
Title: Directo	or, Field Env	vironmental				Approval Da	te: 11920	ש	Expiration	Date:				
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District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

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

Release Notification and Corrective Action													
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	company: E						nomas Long						
	614 Reilly A			87401			No. 505-599-2						
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Surface Ov	wner: BLM			Mineral C)wne	r: BLM			Serial	Number:	SN 08	30782	
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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

Apex TITAN, Inc., a subsidiary of Apex Companies, LLC 606 S Rio Grande, Unit A, Aztec, NM 87410 T 505.334.5200 F 505.334.5204 www.apexcos.com

TABLE OF CONTENTS

1.0	INTRO	DUCTION	1
	1.1	Site Descrip	tion & Background1
	1.2	Project Obje	ective
2.0	SITE R	ANKING	2
3.0	3.1 3.2 3.3	Pipeline Tes Environmen Soil Laborat	2 sting and Repair
4.0	4.1	Soil Sample	N
5.0	FINDIN	IGS AND RE	COMMENDATIONS
6.0	STANE	ARD OF CA	RE, LIMITATIONS, AND RELIANCE7
LIST	OF AP	PENDICES	
Арре	endix A	Figure 1 Figure 2 Figure 3A Figure 3B Figure 3C Figure 3D Figure 3E	Topographic Map Rupture Locations Site Vicinity Map Rupture Locations Rupture 1 and 2 Site Map with Flow Path Soil Analytical Results Rupture 3 Site Map with Flow Path Soil Analytical Results Rupture 4 Site Map with Flow Path Soil Analytical Results Rupture 5 and 7 Site Map with Flow Path Soil Analytical Results Rupture 6, 8, and 9 Site Map with Flow Path Soil Analytical Results

Appendix B: Photographic Documentation

Appendix C: Tables

Appendix D: Laboratory Analytical Reports & Chain of Custody Documentation



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.

Ranking	g 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								

The ranking criteria are provided in the following table:

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.



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

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



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 0.0019 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 *RAL*s 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.

7

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



1

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Project No. 725040112171

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2: Houston South/Drafting/New Mexico 04/2016/725040112171/Figure 3A.mxd 8/8/2016 WGS 1984 Web Mercator Auxiliary Sphere Projected Coordinate System







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APEX

Photographic Documentation



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



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)





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	TPH	TPH	TPH	Chlorides			
	14 14	Depth	((mar Bar)	(ma flam)	((000			(
		(feet)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO	DRO	MRO	(mg/kg)			
								(mg/kg)	(mg/kg)	(mg/kg)				
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level		10	NE	NE	NE	50	100		NE	NE				
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 Path 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 Depth	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH	TPH	ТРН	Chlorides
		(feet)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO	DRO	MRO	(mg/kg)
				1.1.1	× *	1.1		(mg/kg)	(mg/kg)	(mg/kg)	
Resou	Energy, Mine rces Departm on Division, R Action Level	ent, Oil Remediation	10	NE	NE	NE	50	10	00	NE	NE
	Rupture 5 Flow Path 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					and the second second
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	<0.024	<0.048	<0.048	< 0.096	ND	<4.8	<9.9	NA	6.1

ND = Not Detected above the Laboratory Reporting Limits

NE = Not established



TABLE 2Trunk 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	Selenium	Silver
		(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 3Trunk 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) s (SSLs) Industrial	-	-	-	-	77,800	2,080,000	· •	
	Rupture 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)															
				Trunk)					
	WATER ANALYTICAL SUMMARY- Volatile Organic Compounds															
Sample I.D.	Date	Benzene	Toluene	Ethylbenzene	Xylenes	1,2,4- Trimethylbenzene	1,3,5-Trimethylbenzene	Naphthalene	1-Methyinaphthalene	2-Methyinaphthalene	Acetone	Bromodichloromethane	Chloroform	Dibromochlorometharie	Isopropythenzene	n-Propylbenzene
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
New Mexico Water Quality Control Commission Human Health Standards 10 750 750 620 NE NE PAH-30 NE NE 100 NE NE						NE										
						Pipel	ine Header Wa	ter Samples						at an		
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
							upture 1 Water						_			
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	Sample								
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
	Rupture 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 5Trunk 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		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				
Source	6.16.16	<0.020	0.13	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
Rupture 6 Water 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
		5. 		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 6Trunk 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

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

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 6/27/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field ServicesClient Sample ID: Source 36.750534-107.947310Project:MD 16 Inch Trunk RuptureCollection Date: 6/17/2016 8:30:00 AMLab ID:1606A37-001Matrix: SOILReceived 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	GE 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 RAM	IGE				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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method I	Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	Page 1 of 7
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range	rage ror /
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit	t as specified

Date Reported: 6/27/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

MD 16 Inch Trunk Rupture

Project:

Client Sample ID: SC-3 36.748655-107.950182 Collection Date: 6/17/2016 9:06:00 AM Received Date: 6/18/2016 8:00:00 AM

Lab ID: 1606A37-004	Matrix: S	SOIL	Received	Date: 6/1	8/2016 8:00:00 AM	
Analyses	Result	PQL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	6/20/2016 4:35:31 PM	25953
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst	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	GE				Analyst	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					Analyst	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

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

- nge
- ntitation limits Page 2 of 7
- Sample container temperature is out of limit as specified w

Analytical Report Lab Order 1606A37 Date Reported: 6/27/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Enterprise Field ServicesClient Sample ID: SC-4 36-749991-107.948064Project:MD 16 Inch Trunk RuptureCollection Date: 6/17/2016 9:16:00 AMLab ID:1606A37-005Matrix: SOILReceived 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	GE 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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 7
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	w	Sample container temperature is out of limit as specified

Client: Project:		orise Field Services 6 Inch Trunk Rupture		
Sample ID	MB-25953	SampType: MBLK	TestCode: EPA Method 300.0: Anions	
Client ID:	PBS	Batch ID: 25953	RunNo: 35022	
Prep Date:	6/20/2016	Analysis Date: 6/20/2016	SeqNo: 1083001 Units: mg/Kg	
Analyte		Result PQL SPK value S	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	
Chloride		ND 1.5		
Sample ID	LCS-25953	SampType: LCS	TestCode: EPA Method 300.0: Anions	
Client ID:	LCSS	Batch ID: 25953	RunNo: 35022	
Prep Date:	6/20/2016	Analysis Date: 6/20/2016	SeqNo: 1083002 Units: mg/Kg	

Analyte Result PQL SPK value SPK Ref Val %REC HighLimit %RPD RPDLimit Qual LowLimit Chloride 14 1.5 15.00 0 95.2 90 110

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

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 4 of 7

WO#: 1606A37

Client: Project:	1	se Field Services nch Trunk Rupti								
Sample ID	MB-25888	SampType: 1	MBLK	Test	tCode: EP	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	PBS	Batch ID:	25888	R	unNo: 35	5005				
Prep Date:	6/16/2016	Analysis Date:	6/20/2016	S	eqNo: 10	82125	Units: %Red			
Analyte		Result PQI	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.0	10.00		90.4	70	130			
Sample ID	LCS-25888	SampType:	LCS	Test	Code: EP	A Method	8015M/D: Die	esel Range	e Organics	
Client ID:	LCSS	Batch ID:	25888	R	unNo: 35	5005				
Prep Date:	6/16/2016	Analysis Date:	6/20/2016	S	eqNo: 10	82126	Units: %Rec	;		
Analyte		Result PQI	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.5	5.000		90.3	70	130			
				and the second se						
Sample ID	MB-25934	SampType: I	MBLK	Test	Code: EP	A Method	8015M/D: Die	sel Range	e Organics	
	MB-25934 PBS	SampType: I Batch ID: 2			Code: EP		8015M/D: Die	esel Range	e Organics	
Client ID:			25934	R		5006	8015M/D: Die Units: mg/K	Ū	e Organics	
Client ID:	PBS	Batch ID:	25934 6/20/2016	R	tunNo: 35 SeqNo: 10	5006		Ū	e Organics RPDLimit	Qual
Client ID: Prep Date: Analyte	PBS	Batch ID: Analysis Date: Result PQI	25934 6/20/2016	R	tunNo: 35 SeqNo: 10	5006 082985	Units: mg/K	g		Qual
Client ID: Prep Date: Analyte Diesel Range	PBS 6/20/2016	Batch ID: 3 Analysis Date: Result PQI ND 1	25934 6/20/2016 L SPK value	R	tunNo: 35 SeqNo: 10	5006 082985	Units: mg/K	g		Qual
Client ID: Prep Date: Analyte Diesel Range	PBS 6/20/2016 Organics (DRO) ge Organics (MRO)	Batch ID: 3 Analysis Date: Result PQI ND 1	25934 6/20/2016 L SPK value	R	tunNo: 35 SeqNo: 10	5006 082985	Units: mg/K	g		Qual
Client ID: Prep Date: Analyte Diesel Range (Motor Oil Rang Surr: DNOP	PBS 6/20/2016 Organics (DRO) ge Organics (MRO)	Batch ID: 2 Analysis Date: Result PQI ND 1 ND 5	25934 6/20/2016 L SPK value 10 50 10.00	R S SPK Ref Val	2unNo: 35 GeqNo: 10 %REC 105	5006 082985 LowLimit 70	Units: mg/K HighLimit	g %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Diesel Range Motor Oil Rang Surr: DNOP Sample ID	PBS 6/20/2016 Organics (DRO) ge Organics (MRO)	Batch ID: 2 Analysis Date: Result PQI ND 1 ND 5 10	25934 6/20/2016 L SPK value 10 50 10.00 LCS	R SPK Ref Val Test	2unNo: 35 GeqNo: 10 %REC 105	5006 082985 LowLimit 70 PA Method	Units: mg/K HighLimit 130	g %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Diesel Range Motor Oil Rang Surr: DNOP Sample ID	PBS 6/20/2016 Organics (DRO) ge Organics (MRO) LCS-25934 LCSS	Batch ID: 2 Analysis Date: Result PQI ND 1 ND 5 10 SampType: 1	25934 6/20/2016 L SPK value 10 50 10.00 LCS 25934	R SPK Ref Val Test R	2unNo: 35 SeqNo: 10 %REC 105 Code: EP	5006 382985 LowLimit 70 24 Method 5006	Units: mg/K HighLimit 130	g %RPD esel Range	RPDLimit	Qual
Client ID: Prep Date: Analyte Diesel Range Motor Oil Rang Surr: DNOP Sample ID Client ID:	PBS 6/20/2016 Organics (DRO) ge Organics (MRO) LCS-25934 LCSS	Batch ID: 2 Analysis Date: Result PQI ND 1 ND 5 10 SampType: I Batch ID: 2	25934 6/20/2016 L SPK value 10 10.00 LCS 25934 6/20/2016	R SPK Ref Val Test R	tunNo: 35 eqNo: 10 %REC 105 Code: EP tunNo: 35 teqNo: 10	5006 382985 LowLimit 70 24 Method 5006	Units: mg/K HighLimit 130 8015M/D: Die	g %RPD esel Range	RPDLimit	Qual
Client ID: Prep Date: Analyte Diesel Range Motor Oil Rang Surr: DNOP Sample ID Client ID: Prep Date: Analyte	PBS 6/20/2016 Organics (DRO) ge Organics (MRO) LCS-25934 LCSS	Batch ID: 2 Analysis Date: Result PQI ND 1 ND 5 10 SampType: I Batch ID: 2 Analysis Date: Result PQI	25934 6/20/2016 L SPK value 10 10.00 LCS 25934 6/20/2016	R SPK Ref Val Test R S	tunNo: 35 eqNo: 10 %REC 105 Code: EP tunNo: 35 eqNo: 10	5006 082985 LowLimit 70 2'A Method 5006 082986	Units: mg/K HighLimit 130 8015M/D: Die Units: mg/K	g %RPD esel Range	RPDLimit	

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- 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

WO#: 1606A37

27-Jun-16

Page 5 of 7

D Sar H Ho ND No

		27

WO#:

Client: Project:	1	e Field Ser nch Trunk		2							
Sample ID	MB-25948	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	6	-
Client ID:	PBS	Batch	ID: 25	948	R	RunNo: 3	5050				
Prep Date:	6/20/2016	Analysis D	ate: 6/	21/2016	S	SeqNo: 1	084234	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 1000	5.0	1000		102	80	120			
Sample ID	LCS-25948 C	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	LCSS		ID: 25		R	RunNo: 3	5050				
Prep Date:		Analysis D	ate: 6/	21/2016	S	SeqNo: 1	084235	Units: mg/M	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sasoline Rang	e Organics (GRO)	23	5.0	25.00	0	93.3	80	120			
Surr: BFB		1000		1000		105	80	120			
Sample ID	1606A37-001AMS	SampT	ype: MS	3	Test	tCode: Ef	PA Method	8015D: Gaso	line Rang	e	
Client ID:	Source 36.750534	-1 Batch	ID: 25	948	R	unNo: 3	5050				
Prep Date:	6/20/2016	Analysis D	ate: 6/	21/2016	S	SeqNo: 10	084236	Units: mg/M	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	19	4.8	24.11	0	77.2	59.3	143			
Surr: BFB		1000		964.3		105	80	120			
Sample ID	1606A37-001AMS	D SampT	ype: MS	SD	Test	tCode: EF	PA Method	8015D: Gasc	line Rang	0	
Client ID:	Source 36.750534	-1 Batch	ID: 25	948	R	unNo: 3	5050				
Prep Date:	6/20/2016	Analysis D	ate: 6/	21/2016	S	eqNo: 10	084238	Units: mg/M	g		
		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte		Result	IGE	or retrained				-			
	e Organics (GRO)	18 1000	4.7	23.30 932.0	0	78.6 108	59.3 80	143 120	1.51	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

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

Page 6 of 7

1606A37 7-Jun-16

	se Field Se nch Trunk		2							
Sample ID MB-25948	Samp1	Type: Nie	BLK	Tes	Code: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batc	h ID: 25	948	RunNo: 35050						
Prep Date: 6/20/2016	Analysis E	Date: 6/	21/2016	S	eqNo: 1	084239	Units: mg/M	(g		
Analyte						LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
(ylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			
Sample ID LCS-25948	SampT	Type: LC	s	Tes	Code: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batcl	h ID: 25	948	F	unNo: 3	5050				
Prep Date: 6/20/2016	Analysis E	Date: 6/	21/2016	S	eqNo: 1	084240	Units: mg/H	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.5	75.3	123			
Toluene	0.85	0.050	1.000	0	84.7	80	124			
Ethylbenzene	0.83	0.050	1.000	0	83.3	82.8	121			
(ylenes, Total	2.5	0.10	3.000	0	83.8	83.9	122			S
Surr: 4-Bromofluorobenzene	1.1		1.000		113	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
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- 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 7

WO#: 1606A37

Completed By: Lindsay Mangin 0'18/2018 8:50:35 AM ####################################		heck List			
Client Name: Enterprise	Work Order Number	: 1606A37		RcptNo:	1
	e benefice		July Mago		
Completed By: Lindsay Mang	in 6/18/2016 8:50:35 AM		Julythigo		:
Reviewed By:	06/20/16				
Chain of Custody					
1. Custody seals intact on same	ble bottles?	Yes 🗌	No 🗌	Not Present 🛃	
2. Is Chain of Custody complete	?	Yes 🛃	No 🗔	Not Present	
3. How was the sample delivered	od?	Courier			
Log In					
	bl the samples?	Yes 🛃	No 🗍	NA 🗆	
5. Were all samples received a	t a temperature of >0° C to 6.0°C	Yes 🛃	No 🗆	NA 🗔	
6. Sample(s) in proper containe	er(s)?	Yes 🛃	No 🗆		
7. Sufficient sample volume for	indicated test(s)?	Yes 🛃	No 🗌		
8. Are samples (except VOA ar	d ONG) properly preserved?	Yes	No 🗋		
9. Was preservative added to b	ottles?	Yes	No 🛃	NA 🗌	
10 VOA vials have zero headso	ace?	Yes	No 🗆	No VOA Vials 🛃	
		Yes	No 🛃	# of preserved	
		Yes	No 🗀	for pH:	or >12 unless noted)
13 Are matrices correctly identif	led on Chain of Custody?	Yes 🛃	No 🗆	Adjusted?	
14. Is it clear what analyses were	e requested?	Yes 🛃	No 🗌		
		Yes 🛃	No 🗌	Checked by:	
Special Handling (if appli	cable)				
16. Was client notified of all disc	repancies with this order?	Yes	No 🗆	NA 🛃	
Person Notified:	Date:		an a		i
By Whom:	Via:	eMail P	hone 📋 Fax	In Person	
Regarding:	an an air an tha ann an Ann			a a sense a se se anno se	
Client Instructions:	#111.111.12.011.01.01.01.01.02.01.02.00.02.02.02.02.02.00.00.02.02.02.02.				
17. Additional remarks:					
18. Cooler Information					
Cooler No Temp °C	Condition Seal Intact Seal No	Seal Date	Signed By		
	Good Yes				

Page | of 1

122

C	hain	of-Cu	istody F	Record	Tum-An	ound	Time:	Next									те	20			NT		
Client:	Enter	prise	Products		□ Star				ay													RY	e
	Operc	ting			Project	Name	Trunk	mo I	6 Inch					ww.h			•						
Mailing /	Address	614	Reilly A	tue.			Trunk	· Rupt	ture		490	01 Ha	wkin	s NE	- All	buqu	erqu	e, NI	M 87	109			
			m 874		Project	#:					Te	1. 50	5-345	-3975		Fax	505-	345-	4107	7	**	_	
Phone #	: 50	5-50	7-22-8	6		4								_	Anal	ysis	Req	uest				4	
email or	Fax#:	tilong	e eprod.	000	Project					7	(Au	(Gas/Diesel)			1.	04)	S						
QA/QC P		•				-	Thomas	Long		803	as c	ğ				04,S	B						
Stand			Level 4 (F	ull Validation)						1	9	Gas			L.	2,P(2 P						
		Othe	r		Sample		Ales and			TMB's (8021)	BTEX + MTBE + TPH (Gas only)	5B (8.1)			Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082 PCB's		-				ĩ
			·				aje (11) (c.) (17		100	BTEX + MTBE +	н	TPH Method 8015B	TPH (Method 418.1)	(Method 504.1) (PNA or PAH)	als	NO	des	-	8270 (Semi-VOA)	2			Air Bubbles (Y or N)
	<u>(·);-/</u> _				C. TABLER.			5. 5.		H	E	thod	; lắ		We	E,CI	stici	VOV	Ë	hlor de			les
Date	Time	Matrix	Sample	Request ID	Contai Type a		Preservative Type	HEA	-NC	×	+ ×	Me	ž i		8) su	Pe)B(S)	14			Subb
							туре		-74	BTE	E	Ψ	E	8310 (PNA	RCRA 8 Metals	Anio	308	8260B (VOA)	827(9			AirE
-17-16	0830	Soil	Source -	36.750534,	402	ars.	6001	-0		7	_	Ś	-		+=					ম	+	++	
	ORES		Ce A 3	07.951213				-0	2	X		X								×		\square	•
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Date:	Time:	Relinquish	ed by#		Received	by:	4	Date	Time	Ren	narks										-		
Date:	HЬ		Thomas	Jarg	7	div		C 18/16	Time	1 _A	NV#	1	SC	-1,	S		2(0	02.	+0	03)		
Date:	Time:	Relinquist	ed by:	0	Received	⊳у₩		Date	Time	Ρ		PL-	r -	Ton	1	0	6						
												10											_

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.

NAME AND ADDRESS ADDRES

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

June 29, 2016

Thomas Long Enterprise Field Services 614 Reilly Ave. 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 <u>www.hallenvironmental.com</u> 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

1606A36-001

Trunk MD 16 Inch

Project:

Lab ID:

Client Sample ID: Source 36.750534-107.947310 Collection Date: 6/16/2016 8:40:00 PM

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

Analyses	Result	PQL Qu	al 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

Matrix: AQUEOUS

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

Qualifiers:

*

D

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

Value exceeds Maximum Contaminant Level.

- 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

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** Qual 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 R35071 Dibromomethane ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1,2-Dichlorobenzene ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 ND 1,3-Dichlorobenzene 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1,4-Dichlorobenzene ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 Dichlorodifluoromethane ND 10 µg/L 1 6/21/2016 5:23:00 PM R35071 ND 1.1-Dichloroethane 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1,1-Dichloroethene ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1,2-Dichloropropane ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1,3-Dichloropropane ND 1.0 1 6/21/2016 5:23:00 PM R35071 µg/L 2,2-Dichloropropane ND 2.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1,1-Dichloropropene ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 ND Hexachlorobutadiene 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 2-Hexanone ND 10 µg/L 1 6/21/2016 5:23:00 PM R35071 Isopropylbenzene 2.6 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 4-Isopropyltoluene ND 10 µg/L 1 6/21/2016 5:23:00 PM R35071 4-Methyl-2-pentanone ND 10 µg/L 1 6/21/2016 5:23:00 PM R35071 Methylene Chloride ND 3.0 µg/L 1 6/21/2016 5:23:00 PM R35071 n-Butylbenzene ND 30 µg/L 1 6/21/2016 5:23:00 PM R35071 n-Propylbenzene 3.1 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 sec-Butylbenzene ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 Styrene ND 1.0 6/21/2016 5:23:00 PM µg/L 1 R35071 tert-Butylbenzene ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1,1,1,2-Tetrachloroethane ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1.1.2.2-Tetrachloroethane ND 2.0 µg/L 6/21/2016 5:23:00 PM 1 R35071 Tetrachloroethene (PCE) ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 trans-1,2-DCE ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 trans-1,3-Dichloropropene ND 1.0 µg/L 6/21/2016 5:23:00 PM 1 R35071 1,2,3-Trichlorobenzene ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1,2,4-Trichlorobenzene ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1,1,1-Trichloroethane ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1,1,2-Trichloroethane ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 Trichloroethene (TCE) ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 Trichlorofluoromethane ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 1,2,3-Trichloropropane ND 2.0 µg/L 1 6/21/2016 5:23:00 PM R35071 Vinvl chloride ND 1.0 µg/L 1 6/21/2016 5:23:00 PM R35071 Xylenes, Total 120 1.5 µg/L 1 6/21/2016 5:23:00 PM R35071 Surr: 1,2-Dichloroethane-d4 85.8 70-130 %Rec 1 6/21/2016 5:23:00 PM R35071 Surr: 4-Bromofluorobenzene 96.5 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.

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 2 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical H	Report
Lab Order 16	06A36

Date Reported: 6/29/2016

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 Received Date: 6/18/2016 8:00:00 AM Matrix: AQUEOUS Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch EPA METHOD 8260B: VOLATILES Analyst: 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

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 15
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	w	Sample container temperature is out of limit as specified

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 1606A36-002 Lab ID: Matrix: AQUEOUS Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL (Qual 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	ETALS				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	R35071
Toluene	31	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
Ethylbenzene	3.7	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
1,2,4-Trimethylbenzene	50	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
1,3,5-Trimethylbenzene	19	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
1,2-Dichloroethane (EDC)	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
Naphthalene	23	2.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
1-Methylnaphthalene	8.9	4.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
2-Methylnaphthalene	12	4.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
Acetone	50	10	µg/L	1	6/21/2016 6:34:00 PM	R35071
Bromobenzene	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
Bromodichloromethane	2.7	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
Bromoform	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
Bromomethane	ND	3.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
2-Butanone	ND	10	µg/L	1	6/21/2016 6:34:00 PM	R35071
Carbon disulfide	ND	10	µg/L	1	6/21/2016 6:34:00 PM	R35071
Carbon Tetrachloride	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
Chlorobenzene	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
Chloroethane	ND	2.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
Chloroform	24	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
Chloromethane	ND	3.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
2-Chlorotoluene	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
4-Chlorotoluene	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
cis-1,2-DCE	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	6/21/2016 6:34:00 PM	R35071
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	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.

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 S

В Analyte detected in the associated Method Blank

Value above quantitation range E

Analyte detected below quantitation limits Page 4 of 15 J

- Р Sample pH Not In Range
- RL Reporting Detection Limit

Sample container temperature is out of limit as specified W

Analytical Report

Lab Order 1606A36

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

1606A36-002

Project: Lab ID: Trunk MD 16 Inch

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 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.

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 5 of 15
- P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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 12:0								
Lab ID:	1606A36-002	Matrix:	AQUEOUS	Received	Date: 6/1	18/2016 8:00:00 AM					
Analyses		Result	PQL Qual	Units	DF	Date Analyzed	Batch				
EPA ME	THOD 8260B: VOLATILES					Analyst	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.

Qualifiers:

*

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

Value exceeds Maximum Contaminant Level.

- 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 B
- Value above quantitation range E
- Analyte detected below quantitation limits Page 6 of 15 J
- Р Sample pH Not In Range
- RL **Reporting Detection Limit**
- W Sample container temperature is out of limit as specified

Analytical Report

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	Batch
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 N	ETALS				Analyst:	MED
Arsenic	ND	0.020	mg/L	1	6/21/2016 8:25:02 AM	25941
Barium	0.090	0.020	0	1	6/21/2016 8:25:02 AM	25941
Cadmium	ND	0.0020	•	1	6/21/2016 8:25:02 AM	25941
Chromium	ND	0.0060	•	1	6/21/2016 8:25:02 AM	25941
Lead	ND	0.0050	-	1	6/21/2016 8:25:02 AM	25941
Selenium	ND	0.050	-	1	6/21/2016 8:25:02 AM	25941
Silver	ND	0.0050	mg/L	1	6/21/2016 8:25:02 AM	25941
EPA METHOD 8260B: VOLATILES					Analyst:	BCN
Benzene	16	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
Toluene	58	1.0		1	6/21/2016 6:58:00 PM	R35071
Ethylbenzene	5.6	1.0		1	6/21/2016 6:58:00 PM	R35071
Methyl tert-butyl ether (MTBE)	ND	1.0		1	6/21/2016 6:58:00 PM	R35071
1,2,4-Trimethylbenzene	25	1.0		1	6/21/2016 6:58:00 PM	R35071
1,3,5-Trimethylbenzene	9.3	1.0		1	6/21/2016 6:58:00 PM	R35071
1,2-Dichloroethane (EDC)	ND	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
Naphthalene	10	2.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
1-Methylnaphthalene	ND	4.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
2-Methylnaphthalene	4.5	4.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
Acetone	ND	10	µg/L	1	6/21/2016 6:58:00 PM	R35071
Bromobenzene	ND	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
Bromodichloromethane	4.8	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
Bromoform	ND	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
Bromomethane	ND	3.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
2-Butanone	ND	10	µg/L	1	6/21/2016 6:58:00 PM	R35071
Carbon disulfide	ND	10	µg/L	1	6/21/2016 6:58:00 PM	R35071
Carbon Tetrachloride	ND	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
Chlorobenzene	ND	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
Chloroethane	ND	2.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
Chloroform	19	1.0	10	1	6/21/2016 6:58:00 PM	R35071
Chloromethane	ND	3.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
2-Chlorotoluene	ND	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
4-Chlorotoluene	ND	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
cis-1,2-DCE	ND	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	6/21/2016 6:58:00 PM	R35071
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	6/21/2016 6:58:00 PM	R35071

- 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 7 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report

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 Received Date: 6/18/2016 8:00:00 AM Matrix: AQUEOUS Lab ID: 1606A36-003 Result **PQL Qual Units DF** Date Analyzed Batch Analyses EPA METHOD 8260B: VOLATILES Analyst: BCN Dibromochloromethane ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 Dibromomethane ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 ND µg/L 6/21/2016 6:58:00 PM R35071 1,2-Dichlorobenzene 1.0 1 ND 1.0 µg/L 6/21/2016 6:58:00 PM R35071 1,3-Dichlorobenzene 1 ND 1.0 6/21/2016 6:58:00 PM R35071 1.4-Dichlorobenzene µg/L 1 ND Dichlorodifluoromethane 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 ND 6/21/2016 6:58:00 PM R35071 1.1-Dichloroethane 1.0 µg/L 1 ND 1.0 1.1-Dichloroethene µg/L 1 6/21/2016 6:58:00 PM R35071 ND 1,2-Dichloropropane 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 1,3-Dichloropropane ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 2,2-Dichloropropane ND 20 µg/L 1 6/21/2016 6:58:00 PM R35071 1,1-Dichloropropene ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 Hexachlorobutadiene ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 ND µg/L 2-Hexanone 10 1 6/21/2016 6:58:00 PM R35071 Isopropylbenzene 1.8 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 4-Isopropyltoluene ND 1.0 1 6/21/2016 6:58:00 PM R35071 µg/L 4-Methyl-2-pentanone ND 10 1 6/21/2016 6:58:00 PM R35071 µg/L **Methylene Chloride** ND 3.0 µg/L 1 6/21/2016 6:58:00 PM R35071 n-Butvlbenzene ND 3.0 1 6/21/2016 6:58:00 PM R35071 µg/L n-Propylbenzene 4.3 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 sec-Butylbenzene ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 Styrene ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 tert-Butylbenzene ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 1,1,1,2-Tetrachloroethane ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 1,1,2,2-Tetrachloroethane ND 2.0 µg/L 1 6/21/2016 6:58:00 PM R35071 ND Tetrachloroethene (PCE) 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 trans-1,2-DCE ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 ND trans-1,3-Dichloropropene 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 1,2,3-Trichlorobenzene ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 1,2,4-Trichlorobenzene ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 1,1,1-Trichloroethane ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 ND 1,1,2-Trichloroethane 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 Trichloroethene (TCE) ND 1.0 6/21/2016 6:58:00 PM µg/L 1 R35071 Trichlorofluoromethane ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 ND 1,2,3-Trichloropropane 2.0 µg/L 1 6/21/2016 6:58:00 PM R35071 Vinyl chloride ND 1.0 µg/L 1 6/21/2016 6:58:00 PM R35071 Xylenes, Total 80 1.5 µg/L 1 6/21/2016 6:58:00 PM R35071 Surr: 1,2-Dichloroethane-d4 86.3 70-130 %Rec 6/21/2016 6:58:00 PM 1 R35071 Surr: 4-Bromofluorobenzene 100 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.

- Qualifiers: * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
 - 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 15
- P Sample pH Not In Range
- RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Date Reported: 6/29/2016

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 Batch

Hall Environmental Analysis Laboratory, Inc.

EPA METHOD 8260B: VOLATILES					Analyst	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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 9 of 15
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Client: Enterprise Field Services

Project: Trunk MD 16 Inch

Sample ID tune 6	SampTy	rpe: MBLK	Tes	tCode: EPA Meth	od 8260B: VOL	ATILES		
Client ID: PBW		ID: R35071	R	RunNo: 35071				
Prep Date:		ate: 6/21/2016		SeqNo: 1084527	Units: µg/L			
	Result		e SPK Ref Val			%RPD	RPDLimit	Qual
Analyte Benzene	ND	1.0	SPR Rei Val	%REC LOWLIII	nt HighLinnt	70RPD	RFDLIIIII	Quai
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						
,2-Dichloropropane	ND	1.0						
1,3-Dichloropropane	ND	1.0						
2,2-Dichloropropane	ND	2.0						
- sonoropropulo		2.0						

Qualifiers:

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

Page 10 of 15

WO#: 1606A36

Client: Enterprise Field Services

Project: Trunk MD 16 Inch

Sample ID tune 6	SampTy	-			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch	ID: R3	5071	RunNo: 35071							
Prep Date:	Analysis Da	ate: 6/2	21/2016	S	eqNo: 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									
sopropylbenzene	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									
ert-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									
rans-1,2-DCE	ND	1.0									
rans-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									
/inyl chloride	ND	1.0									
Kylenes, 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	9.4		10.00		94.4	70	130				
Surr: Toluene-d8	9.9		10.00		99.4	70	130				
Sample ID 1606a36-001am	s SampTy										

Sample ID	1000a30-001ams	Sampi	ype. we	>	165	Coue. El	Amethod	OZOUD. VUL	ATILES		
Client ID:	Source 36.750534-	R	RunNo: 35071								
Prep Date:		Analysis D	ate: 6/	21/2016	S	eqNo: 1	084538	Units: µg/L			
Analyte		Result	PQL	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			
Chlorobenzene	•	21	1.0	20.00	0	103	70	130			

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- E Value above quantitation range
- 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

WO#: 1606A36

QC SUMMARY REPORT	
Hall Environmental Analysis Laboratory, Inc	•

Client: Enterprise Field Services

Project: Trunk MD 16 Inch

Sample ID 1606a36-001am	s Sampi	ype: MS	5	les	icode: El	PA Method	8260B: VOL	ATILES		
Client ID: Source 36.7505	34-1 Batch	n ID: R3	5071	F	RunNo: 3	5071				
Prep Date:	Analysis D)ate: 6/	21/2016	5	SeqNo: 1	084538	Units: 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 1606a36-001am	sd SampT	ype: MS	SD	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: Source 36.7505	34-1 Batch	n ID: R3	5071	F	RunNo: 3	5071				
Prep Date:	Analysis D	ate: 6/	21/2016	5	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	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	93.7	70	130	7.96	20	
Trichloroethene (TCE)	19	1.0	20.00	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		10.00		95.3	70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.0	70	130	0	0	
Sample ID 100ng Ics	SampT	ype: LC	s	Tes	Code: El	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batch	n ID: R3	5071	R	unNo: 3	5071				
Prep Date:	Analysis D	ate: 6/	21/2016	S	eqNo: 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			

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Page 12 of 15

Sample pH Not In Range

Р

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

WO#: 1606A36

QC SUMMARY REPORT

Client:

Project:	Trunk MI										
Sample ID	MB-25939	Sam	Type:	MBLK	Tes	tCode: E	EPA Method	7470: Mercur	у		
Client ID:	PBW	Bat	ch ID:	25939	F	RunNo:	35037				
Prep Date:	6/20/2016	Analysis	Date:	6/20/2016	5	SeqNo:	1083381	Units: mg/L			
Analyte		Result	PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		ND	0.000	20							
Sample ID	LCS-25939	Sam	Type:	LCS	Tes	tCode: E	PA Method	7470: Mercur	у		
Client ID:	LCSW	Bat	ch ID:	25939	F	RunNo:	35037				
Prep Date:	6/20/2016	Analysis	Date:	6/20/2016	5	SeqNo:	1083382	Units: mg/L			
Analyte		Result	PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0048	0.000	20 0.005000	0	96.3	80	120			
Sample ID	1606A36-001BMS	Sam	Type:	MS	Tes	tCode: E	PA Method	7470: Mercur	y		
Client ID:	Source 36.750534	-1 Bat	ch ID:	25939	F	RunNo:	35037				
Prep Date:	6/20/2016	Analysis	Date:	6/20/2016	S	SeqNo:	1083384	Units: mg/L			
Analyte		Result	PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0050	0.000	20 0.005000	0	100	75	125			
Sample ID	1606A36-001BMS	Samp	Type:	MSD	Tes	tCode: E	PA Method	7470: Mercury	y		
Client ID:	Source 36.750534	1 Bat	ch ID:	25939	F	RunNo:	35037				
Prep Date:	6/20/2016	Analysis	Date:	6/20/2016	S	eqNo:	1083385	Units: mg/L			
Analyte		Result	PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0050	0.000	20 0.005000	0	99.5	75	125	0.754	20	

Hall Environmental Analysis Laboratory, Inc.

Enterprise Field Services

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Page 13 of 15

WO#: 1606A36

-	e Field Se									
Trunk MI	0 16 Inch	1								
MB-25941	Samp	Туре: МЕ	BLK	Tes	tCode: E	PA 6010B:	Total Recover	able Met	als	
PBW	Bato	h ID: 25	941	F	RunNo: 3	5033				
6/20/2016	Analysis	Date: 6/	21/2016	5	SeqNo: 1	083100	Units: mg/L			
	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	ND	0.020								
	ND	0.020								
	ND	0.0020								
	ND	0.0060								
	ND	0.0050								
	ND	0.050								
	ND	0.0050								
LCS-25941	Samp	Type: LC	s	Tes	tCode: E	PA 6010B:	Total Recover	able Meta	als	
LCSW	Bato	ch ID: 25	941	F	RunNo: 3	5033				
6/20/2016	Analysis	Date: 6/	21/2016	5	SeqNo: 1	083101	Units: mg/L			
	Result	PQL			%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	0.50	0.020	0.5000	0	101	80	120			
	0.49	0.020	0.5000	0	98.3	80	120			
	0.49	0.0020	0.5000	0	98.9	80	120			
	0.49	0.0060	0.5000	0	98.7	80	120			
	0.49	0.0050	0.5000	0	98.4	80	120			
	0.51	0.050	0.5000	0	103	80	120			
	0.10	0.0050	0.1000	0	99.6	80	120			
1606A36-001BMS	Samp	Type: MS	3	Tes	tCode: E	PA 6010B:	Total Recover	able Meta	als	
Source 36.750534	-1 Bato	h ID: 25	941	F	RunNo: 3	5033				
6/20/2016	Analysis	Date: 6/	21/2016	5	SeqNo: 1	083104	Units: mg/L			
	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	0.52	0.020	0.5000	0	104	75	125			
	0.62	0.020	0.5000	0.1331	96.6	75	125			
	0.49	0.0020	0.5000	0	97.3	75	125			
	0.48	0.0060	0.5000	0.003980	95.4	75	125			
	0.48	0.0050	0.5000	0	95.3	75	125			
	0.50	0.050	0.5000	0	99.9	75	125			
	0.099	0.0050	0.1000	0	98.6	75	125			
1606A36-001BMS	Samp	Туре: МЗ	SD	Tes	tCode: E	PA 6010B:	Total Recover	able Meta	ls	
Source 36.750534	-1 Bato	h ID: 25	941	F	RunNo: 3	5033				
6/20/2016	Analysis I	Date: 6/	21/2016	S	SeqNo: 1	083105	Units: mg/L			
	Desult	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Result	FUL	OF IN VUIDE	of it it it it	MILLO	LOWEIN	. ingrite intro	North D	THE DENTIL	General
	MB-25941 PBW 6/20/2016 LCS-25941 LCSW 6/20/2016 1606A36-001BMS Source 36.750534 6/20/2016	MB-25941 Samp PBW Bata 6/20/2016 Analysis Result ND ND ND	MB-25941 SampType: MB PBW Batch ID: 25 6/20/2016 Analysis Date: 6/ Result PQL ND 0.020 ND 0.020 ND 0.020 ND 0.020 ND 0.0050 LCSW Batch ID: 25 6/20/2016 Analysis Date: 6/ 0.49 0.0020 0.49 0.0050 0.51 0.050 0.51 0.050 1606A36-001BMS SampType: MS 6/20/2016 Analysis Date: 6/ 6/20/2016 <td>MB-25941 SampType: MBLK PBW Batch ID: 25941 6/20/2016 Analysis Date: 6/21/2016 Result PQL SPK value ND 0.020 ND ND 0.020 ND ND 0.020 ND ND 0.0000 ND ND 0.0050 ND ND 0.0050 ND ND 0.0050 ND LCS-25941 SampType: LCS LCSW Batch ID: 25941 6/20/2016 Analysis Date: 6/21/2016 Result POL SPK value 0.500 0.020 0.5000 0.49 0.0020 0.5000 0.49 0.0020 0.5000 0.49 0.0020 0.5000 0.49 0.0050 0.5000 0.51 0.050 0.5000 0.52 0.020 0.5000 0.52 0.020 0.5000 <</td> <td>MB-25941 Samp⊺ye: MBLK Tes PBW Batch ID: 25941 F 6/20/2016 Analysis Date: 6/21/2016 S Result PQL SPK value SPK Ref Val ND 0.020 ND 0.020 ND 0.0020 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 LCS-25941 SampType: LCS Tes LCSW Batch ID: 25941 F 6/20/2016 Analysis Date: 6/21/2016 S Result PQL SPK value SPK Ref Val 0.50 0.020 0.5000 0 0.49 0.0020 0.5000 0 0.49 0.0050 0.5000 0 0.51 0.050 0.5000 0 0.52 0.020 0.5000 0 0.52 0.020 0.5000 0 0.52</td> <td>MB-25941 SampType: MBLK TestCode: E PBW Batch ID: 25941 RunNo: 3 6/20/2016 Analysis Date: 6/21/2016 SPK Ref Val %REC ND 0.020 ND 0.020 %REC %REC ND 0.0020 ND 0.0020 %REC %REC ND 0.0050 ND 0.0050 %REC %REC ND 0.0050 ND 0.0050 %REC %REC LCS-25941 SampType: LCS TestCode: E LCSW Batch ID: 25941 RunNo: 3 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1 Result POL SPK value SPK Ref Val %REC 0.50 0.020 0.5000 0 101 0.49 0.020 0.5000 98.3 0.49 0.020 0.5000 98.7 0.49 0.020 0.5000 98.7</td> <td>MB-25941 SampType: MBLK TestCode: EPA 6010B: PBW Batch ID: 25941 RunNo: 35033 6/20/2016 Analysis Date: 6/21/2016 SeqNo:: 1083100 Result PQL SPK value SPK Ref Val %REC LowLimit ND 0.020 ND 0.0020 ND ND 0.0020 ND 0.00060 ND 0.0060 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ItemNo: 35033 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083101 CSSW Batch ID: 25941 RunNo: 35033 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083101 Result POL SPK value SPK Ref Val %REC LowLimit 6/20/2016 Analysis Date: 6/21/2016 98.9 80 0.49 0.0050 0.5000</td> <td>MB-25941 SampType: MBLK TestCode: EPA 6010B: Total Recover PBW Batch ID: 25941 RunNo: 35033 Jamp 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083100 Units: mg/L Result POL SPK value SPK Ref Val %REC LowLimit HighLimit ND 0.0020 ND 0.0020 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 LCS-25941 SampType: LCS TestCode: EPA 6010B: Total Recover LCSW Batch ID: 25941 RunNo: 35033 0 120 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083101 Units: mg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 0.50 0.020 0.5000 0 98.3 80 120 0.49 0.0020</td> <td>MB-25941 SampType: MBLK TestCode: EPA 6010B: Total Recoverable Meta PBW Batch ID: 25941 RunNo: 35033 Graph 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083100 Units: mg/L Result POL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD ND 0.020 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 LCS-25941 SampType: LCS TestCode: EPA 6010B: Total Recoverable Meta LGSW Batch ID: 25941 RunNo: 35033 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083101 Units: mg/L LGS Batch ID: 25941 RunNo: 35033 120 0.050 0.020 0.5000 0 98.3 80 120</td> <td>MB-25941 Samp Type: MB Lx TestCode: EPA 6010B: Total Recoverable Metals PBW Batch ID: 25941 RunNo: 35033 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083100 Units: mg/L ND 0.020 SeqNo: 1083100 Units: mg/L RPDLimit %RPD RPDLimit ND 0.020 ND 0.020 SeqNo: Low/Lmit HighLimit %RPD RPDLimit ND 0.000 - SeqNo: 1083101 Units: mg/L ND 0.0000 - - SeqNo: 1083101 Units: mg/L LCS-25941 SampType: LCS TestCode: EPA 6010B: Total Recoverable Metals LGSW Batch ID: 25941 RunNo: 35033 Units: mg/L LGSW Batch ID: 25941 SPK Ref Val %REC low/Limit HighLimit %RPD RPDLimit 0.020 0.020</td>	MB-25941 SampType: MBLK PBW Batch ID: 25941 6/20/2016 Analysis Date: 6/21/2016 Result PQL SPK value ND 0.020 ND ND 0.020 ND ND 0.020 ND ND 0.0000 ND ND 0.0050 ND ND 0.0050 ND ND 0.0050 ND LCS-25941 SampType: LCS LCSW Batch ID: 25941 6/20/2016 Analysis Date: 6/21/2016 Result POL SPK value 0.500 0.020 0.5000 0.49 0.0020 0.5000 0.49 0.0020 0.5000 0.49 0.0020 0.5000 0.49 0.0050 0.5000 0.51 0.050 0.5000 0.52 0.020 0.5000 0.52 0.020 0.5000 <	MB-25941 Samp⊺ye: MBLK Tes PBW Batch ID: 25941 F 6/20/2016 Analysis Date: 6/21/2016 S Result PQL SPK value SPK Ref Val ND 0.020 ND 0.020 ND 0.0020 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 LCS-25941 SampType: LCS Tes LCSW Batch ID: 25941 F 6/20/2016 Analysis Date: 6/21/2016 S Result PQL SPK value SPK Ref Val 0.50 0.020 0.5000 0 0.49 0.0020 0.5000 0 0.49 0.0050 0.5000 0 0.51 0.050 0.5000 0 0.52 0.020 0.5000 0 0.52 0.020 0.5000 0 0.52	MB-25941 SampType: MBLK TestCode: E PBW Batch ID: 25941 RunNo: 3 6/20/2016 Analysis Date: 6/21/2016 SPK Ref Val %REC ND 0.020 ND 0.020 %REC %REC ND 0.0020 ND 0.0020 %REC %REC ND 0.0050 ND 0.0050 %REC %REC ND 0.0050 ND 0.0050 %REC %REC LCS-25941 SampType: LCS TestCode: E LCSW Batch ID: 25941 RunNo: 3 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1 Result POL SPK value SPK Ref Val %REC 0.50 0.020 0.5000 0 101 0.49 0.020 0.5000 98.3 0.49 0.020 0.5000 98.7 0.49 0.020 0.5000 98.7	MB-25941 SampType: MBLK TestCode: EPA 6010B: PBW Batch ID: 25941 RunNo: 35033 6/20/2016 Analysis Date: 6/21/2016 SeqNo:: 1083100 Result PQL SPK value SPK Ref Val %REC LowLimit ND 0.020 ND 0.0020 ND ND 0.0020 ND 0.00060 ND 0.0060 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ItemNo: 35033 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083101 CSSW Batch ID: 25941 RunNo: 35033 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083101 Result POL SPK value SPK Ref Val %REC LowLimit 6/20/2016 Analysis Date: 6/21/2016 98.9 80 0.49 0.0050 0.5000	MB-25941 SampType: MBLK TestCode: EPA 6010B: Total Recover PBW Batch ID: 25941 RunNo: 35033 Jamp 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083100 Units: mg/L Result POL SPK value SPK Ref Val %REC LowLimit HighLimit ND 0.0020 ND 0.0020 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 LCS-25941 SampType: LCS TestCode: EPA 6010B: Total Recover LCSW Batch ID: 25941 RunNo: 35033 0 120 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083101 Units: mg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 0.50 0.020 0.5000 0 98.3 80 120 0.49 0.0020	MB-25941 SampType: MBLK TestCode: EPA 6010B: Total Recoverable Meta PBW Batch ID: 25941 RunNo: 35033 Graph 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083100 Units: mg/L Result POL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD ND 0.020 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 ND 0.0050 LCS-25941 SampType: LCS TestCode: EPA 6010B: Total Recoverable Meta LGSW Batch ID: 25941 RunNo: 35033 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083101 Units: mg/L LGS Batch ID: 25941 RunNo: 35033 120 0.050 0.020 0.5000 0 98.3 80 120	MB-25941 Samp Type: MB Lx TestCode: EPA 6010B: Total Recoverable Metals PBW Batch ID: 25941 RunNo: 35033 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1083100 Units: mg/L ND 0.020 SeqNo: 1083100 Units: mg/L RPDLimit %RPD RPDLimit ND 0.020 ND 0.020 SeqNo: Low/Lmit HighLimit %RPD RPDLimit ND 0.000 - SeqNo: 1083101 Units: mg/L ND 0.0000 - - SeqNo: 1083101 Units: mg/L LCS-25941 SampType: LCS TestCode: EPA 6010B: Total Recoverable Metals LGSW Batch ID: 25941 RunNo: 35033 Units: mg/L LGSW Batch ID: 25941 SPK Ref Val %REC low/Limit HighLimit %RPD RPDLimit 0.020 0.020

* 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 14 of 15

WO#: 1606A36

Client: Enterprise Field Services

Project: Trunk MD 16 Inch

Sample ID	1606A36-001BMS	D Samp	Type: MS	D	TestCode: EPA 6010B: Total Recoverable Metals											
Client ID:	Source 36.750534	-1 Batc	h ID: 259	941	R	RunNo: 35033										
Prep Date:	6/20/2016	Analysis [Date: 6/2	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	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
- 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 15 of 15

29-Jun-16

WO#: 1606A36

HALL ENVIRONMENTAL ANALYSIS LABORATORY	TEL: 505-34	mental Analysis 4901 h Albuquerque, 5-3975 FAX: 502 www.hallenvironi	lawkins NE NM 87105 5-345-4107	Sample Log-In Check List							
Client Name: Enterprise	Work Order Nu	umber: 1606A3	6		RcptNo:	1					
Received by/date: Logged By: LindsayMangin	0 Ce 18 1 6/18/2016 8:00:0	Lo AM	0	july Mago		.					
Completed By: Lindsay Mangin	6/18/2016 8:43:5		C	+ Mago							
Reviewed By:	06/20/1	6	V			i					
Chain of Custody	047 7.										
1. Custody seals intact on sample t	ottles?	Yes []	No 🗌	Not Present						
2. Is Chain of Custody complete?		Yes		No 🗆	Not Present						
3. How was the sample delivered?		Courie	ſ								
Log In											
4. Was an attempt made to cool th	a samples?	Yes		No 🗌	NA 🗆						
5. Were all samples received at a t	emperature of >0° C to 6.0°C	Yes		No 🗌	NA 🗆						
6. Sample(s) in proper container(s)	?	Yes		No 🗆							
7. Sufficient sample volume for indi	cated test(s)?	Yes		No 🔲	2						
8. Are samples (except VOA and O	NG) properly preserved?	Yes		No 🗌							
9. Was preservative added to bottle	s?	Yes [No 🖻	NA 🗔						
10.VOA vials have zero headspace?	,	Yes		No 🗆	No VOA Vials						
11. Were any sample containers rec	eived broken?	Yes		No 🛃	# of preserved bottles checked						
12. Does paperwork match bottle lak		Yes		No 🗌	for pH:	or >12 unless noted)					
(Note discrepancies on chain of 13. Are matrices correctly identified		Yes		No 🗀	Adjusted?						
14. Is it clear what analyses were red	-	Yes		No 🗆							
15. Were all holding times able to be (If no, notify customer for author)		Yes		No 🗆	Checked by:						
Special Handling (if applicat											
16. Was client notified of all discrepa	ncies with this order?	Yes [No 🗌	NA 🛃						
Person Notified:	C	Date:									
By Whom:	V	/ia: 🗌 eMail	Phor	ne 🗌 Fax	In Person	!					
Regarding:											
Client Instructions:						!					
17. Additional remarks:											
18. <u>Cooler Information</u>					1						
Cooler No Temp °C Cor 1 1.4 Good	dition Seal Intact Seal N Yes	lo Seal Dat	e Sig	ned By							

;

Page 1 of 1

ate: Time: Relinguished by: Received by: 'D' Date Think	Time: Relinquished by:					1139 1, Hender ESS71	7-16 1203 Header IS 480	16-6 2040 Water Source 36-75034	Matrix Samp	EDD (Type)	NELAP D Other	creditation	Standard D Level 4 (Full Validation)		con	125-202-205	raminator. NM BAYNO	alling Address: 614 Reilly Ave.		en: Enterprise Products	hain-of-Custody Record
Received by: 'D' Date	Received by:	-						STONE HCL/HND -0	Container P Type and #	Sample Teloplana STA	CHIGO STATION IN THIS	Sampler: TJC	anas cantu	7	Project Manager:		Project #:	16 Inch	Project Name: Trunk MD	Standard & Rush VC	Tum-Around Time: Next
a ss notice of the neesthilds. Any a k-pontrovided	Time Remarks:					j I			BTEX + MT BTEX + MT TPH 8015B TPH (Metho EDB (Metho	BE (GI	+ T RO 18.1	PH / DF 1)	(Gas	or	nly)		Tel. 505-345-3975	4901 Hawkins NE	WWW		
						X	X X	X	PAH's (831) RCRA 8 Me Anions (F,C 8081 Pestic 8260B (VO/ 8270 (Semi	ides	8270 SI D ₃ ,NO ₂ ,F s / 8082		PO₄	PO4,SC		Anal		VE - Albuquerque, NM 87109	www.hallenvironmental.com	2	LL ENVIRONMENTAL
									Air Bubbles	(Y	or N	l)								TORY	ITAL



July 14, 2016

Thomas Long Enterprise Field Services 614 Reilly Ave. Farmington, NM 87401 TEL: (505) 599-2141 FAX Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

OrderNo.: 1606B73

Dear Thomas Long:

RE: Trunk MD 16 Inch

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

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

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

Sincerely,

and

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109
Analytical Report Lab Order 1606B73

Date Reported: 7/14/2016

Hall Environmental Analysis Laboratory, Inc.

 CLIENT:
 Enterprise Field Services
 Client Sample ID: SR SC-1

 Project:
 Trunk MD 16 Inch
 Collection Date: 6/19/2016 1:30:00 PM

 Lab ID:
 1606B73-001
 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					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 RAM	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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1606B73

Date Reported: 7/14/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

1606B73-002

Trunk MD 16 Inch

Project:

Lab ID:

Client Sample ID: SR WS-1 Collection Date: 6/19/2016 12:05:00 PM

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

nalyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batc
EPA METHOD 8260B: VOLATILES					Analyst	DJF
Benzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
Toluene	1.1	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
Ethylbenzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,2,4-Trimethylbenzene	1.6	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,3,5-Trimethylbenzene	1.1	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,2-Dichloroethane (EDC)	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
Naphthalene	ND	2.0	µg/L	1	6/27/2016 9:17:19 PM	A35
1-Methylnaphthalene	ND	4.0	µg/L	1	6/27/2016 9:17:19 PM	A352
2-Methylnaphthalene	ND	4.0	µg/L	1	6/27/2016 9:17:19 PM	A352
Acetone	ND	10	µg/L	1	6/27/2016 9:17:19 PM	A35
Bromobenzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
Bromodichloromethane	8.8	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
Bromoform	ND	1.0	μg/L	1	6/27/2016 9:17:19 PM	A35
Bromomethane	ND	3.0	µg/L	1	6/27/2016 9:17:19 PM	A35
2-Butanone	ND	10	µg/L	1	6/27/2016 9:17:19 PM	A35
Carbon disulfide	ND	10	µg/L	1	6/27/2016 9:17:19 PM	A35
Carbon Tetrachloride	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
Chlorobenzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
Chloroethane	ND	2.0	µg/L	1	6/27/2016 9:17:19 PM	A35
Chloroform	74	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
Chloromethane	ND	3.0	µg/L	1	6/27/2016 9:17:19 PM	A35
2-Chlorotoluene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
4-Chlorotoluene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
cis-1,2-DCE	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	6/27/2016 9:17:19 PM	A35
Dibromochloromethane	1.1	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
Dibromomethane	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
1,2-Dichlorobenzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
1,3-Dichlorobenzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
1,4-Dichlorobenzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
Dichlorodifluoromethane	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,1-Dichloroethane	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,1-Dichloroethene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A35
1,2-Dichloropropane	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,3-Dichloropropane	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
2,2-Dichloropropane	ND	2.0	µg/L	1	6/27/2016 9:17:19 PM	A352

Matrix: AQUEOUS

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 Page 2 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1606B73

Date Reported: 7/14/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services Project: Trunk MD 16 Inch

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

Analyses	Result	PQL Qua	l 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	A352
4-Methyl-2-pentanone	ND	10	µg/L	1	6/27/2016 9:17:19 PM	A352
Methylene Chloride	ND	3.0	µg/L	1	6/27/2016 9:17:19 PM	A352
n-Butylbenzene	ND	3.0	µg/L	1	6/27/2016 9:17:19 PM	A352
n-Propylbenzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
sec-Butylbenzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
Styrene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
tert-Butylbenzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	1	6/27/2016 9:17:19 PM	A352
Tetrachloroethene (PCE)	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
trans-1,2-DCE	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,1,1-Trichloroethane	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,1,2-Trichloroethane	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
Trichloroethene (TCE)	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
Trichlorofluoromethane	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
1,2,3-Trichloropropane	ND	2.0	µg/L	1	6/27/2016 9:17:19 PM	A352
Vinyl chloride	ND	1.0	µg/L	1	6/27/2016 9:17:19 PM	A352
Xylenes, Total	4.9	1.5	µg/L	1	6/27/2016 9:17:19 PM	A352
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	6/27/2016 9:17:19 PM	A352
Surr: 4-Bromofluorobenzene	98.7	70-130	%Rec	1	6/27/2016 9:17:19 PM	A352
Surr: Dibromofluoromethane	99.7	70-130	%Rec	1	6/27/2016 9:17:19 PM	A352
Surr: Toluene-d8	92.5	70-130	%Rec	1	6/27/2016 9:17:19 PM	A352

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

WO#: 1606B73

14-Jul-16

Client: Project:		erprise Field Serv nk MD 16 Inch	vices								
Sample ID	MB-26073	SampTy	pe: ME	BLK	Tes	tCode: E	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch	ID: 26	073	F	RunNo: 3	5186				
Prep Date:	6/24/2016	Analysis Da	ate: 6/	24/2016	s	SeqNo: 1	088718	Units: mg/K	g		
Analyte Chloride		Result ND	PQL 1.5	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID	LCS-26073	SampTy	pe: LC	S	Tes	tCode: E	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 26	073	R	RunNo: 3	5186				
Prep Date:	6/24/2016	Analysis Da	ite: 6/	24/2016	S	SeqNo: 1	088719	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	93.2	90	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
- 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 4 of 13

QC SUMMARY REPORT

Hall Env	vironmental Analysis Laboratory, Inc.	
Client:	Enterprise Field Services	
Project:	Trunk MD 16 Inch	

Sample ID MB-25992	SampTy	pe: ME	BLK	Tes	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch	ID: 25	992	R	RunNo: 35221						
Prep Date: 6/22/2016	Analysis Da	ate: 6/	27/2016	S	SeqNo: 1	089257	Units: mg/k	۲g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Surr: DNOP	8.9		10.00		88.6	70	130				
Sample ID LCS-25992	SampTy	pe: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Range	• Organics		
Client ID: LCSS	Batch	ID: 25	992	R	RunNo: 3	5221					
Prep Date: 6/22/2016	Analysis Da	ite: 6/	27/2016	S	SeqNo: 1	089274	Units: mg/k	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Range Organics (DRO)	52	10	50.00	0	103	62.6	124				
			5.000		96.6	70	130				
Surr: DNOP	4.8		5.000		90.0	70	150				
Surr: DNOP Sample ID 1606B73-001AM		pe: MS		Test			8015M/D: Di	esel Range	e Organics		
	S SampTy	pe: MS ID: 25	3			PA Method		esel Range	organics		
Sample ID 1606B73-001AM	S SampTy	ID: 25	3 992	R	tCode: El	PA Method 5219			e Organics		
Sample ID 1606B73-001AM Client ID: SR SC-1	S SampTy Batch	ID: 25	3 992 27/2016	R	tCode: El	PA Method 5219	8015M/D: Di		e Organics	Qual	
Sample ID 1606B73-001AM Client ID: SR SC-1 Prep Date: 6/22/2016	S SampTy Batch Analysis Da	ID: 259	3 992 27/2016	R	tCode: El RunNo: 3 SeqNo: 1	PA Method 5219 089739	8015M/D: Di Units: mg/H	<g< td=""><td>-</td><td>Qual</td></g<>	-	Qual	
Sample ID 1606B73-001AM Client ID: SR SC-1 Prep Date: 6/22/2016 Analyte	S SampTy Batch Analysis Da Result	ID: 25 9 Ite: 6 /2 PQL	5 992 27/2016 SPK value	R S SPK Ref Val	tCode: El RunNo: 3 SeqNo: 1 %REC	PA Method 5219 089739 LowLimit	8015M/D: Di Units: mg/k HighLimit	<g< td=""><td>-</td><td>Qual</td></g<>	-	Qual	
Sample ID 1606B73-001AM Client ID: SR SC-1 Prep Date: 6/22/2016 Analyte Range Organics (DRO)	S SampTy Batch Analysis Da Result 39 4.3	ID: 25 9 Ite: 6 / PQL 9.2	5 992 27/2016 SPK value 45.87 4.587	R S SPK Ref Val 2.122	tCode: El RunNo: 3 SeqNo: 1 %REC 80.5 93.9	PA Method 5219 089739 LowLimit 33.9 70	8015M/D: Di Units: mg/k HighLimit 141	⟨g %RPD	RPDLimit	Qual	
Sample ID 1606B73-001AM Client ID: SR SC-1 Prep Date: 6/22/2016 Analyte Range Organics (DRO) Surr: DNOP	S SampTy Batch Analysis Da Result 39 4.3 SD SampTy	ID: 25 9 Ite: 6 / PQL 9.2	5 992 27/2016 SPK value 45.87 4.587	R S SPK Ref Val 2.122 Test	tCode: El RunNo: 3 SeqNo: 1 %REC 80.5 93.9	PA Method 5219 089739 LowLimit 33.9 70 PA Method	8015M/D: Di Units: mg/H HighLimit 141 130	⟨g %RPD	RPDLimit	Qual	
Sample ID 1606B73-001AM Client ID: SR SC-1 Prep Date: 6/22/2016 Analyte Range Organics (DRO) Surr: DNOP Sample ID 1606B73-001AM	S SampTy Batch Analysis Da Result 39 4.3 SD SampTy	ID: 259 Ite: 6// PQL 9.2 ID: 259	5 992 27/2016 SPK value 45.87 4.587 5D 992	R S SPK Ref Val 2.122 Test R	tCode: El RunNo: 3 SeqNo: 1 %REC 80.5 93.9 tCode: El	PA Method 5219 089739 LowLimit 33.9 70 PA Method 5219	8015M/D: Di Units: mg/H HighLimit 141 130	(g %RPD esel Range	RPDLimit	Qual	
Sample ID 1606B73-001AM Client ID: SR SC-1 Prep Date: 6/22/2016 Analyte Range Organics (DRO) Surr: DNOP Sample ID 1606B73-001AM Client ID: SR SC-1	S SampTy Batch Analysis Da Result 39 4.3 SD SampTy Batch	ID: 259 Ite: 6// PQL 9.2 ID: 259	5 9992 27/2016 SPK value 45.87 4.587 5D 9992 27/2016	R S SPK Ref Val 2.122 Test R	tCode: El RunNo: 3 SeqNo: 1 %REC 80.5 93.9 tCode: El RunNo: 3 SeqNo: 1	PA Method 5219 089739 LowLimit 33.9 70 PA Method 5219	8015M/D: Di Units: mg/k HighLimit 141 130 8015M/D: Di	(g %RPD esel Range	RPDLimit	Qual	
Sample ID 1606B73-001AM Client ID: SR SC-1 Prep Date: 6/22/2016 Analyte Range Organics (DRO) Surr: DNOP Sample ID 1606B73-001AM Client ID: SR SC-1 Prep Date: 6/22/2016	S SampTy Batch Analysis Da Result 39 4.3 SD SampTy Batch Analysis Da	ID: 259 tte: 6// PQL 9.2 ID: 259 tte: 6//	5 9992 27/2016 SPK value 45.87 4.587 5D 9992 27/2016	R S SPK Ref Val 2.122 Test R S	tCode: El RunNo: 3 SeqNo: 1 %REC 80.5 93.9 tCode: El RunNo: 3 SeqNo: 1	PA Method 5219 089739 LowLimit 33.9 70 PA Method 5219 089740	8015M/D: Di Units: mg/k HighLimit 141 130 8015M/D: Di Units: mg/k	(g %RPD esel Rango (g	RPDLimit		

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- 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 5 of 13

1606B73 14-Jul-16

WO#:

WO#: 1606B73

14-Jul-16

Client: Project:	Enterprise Trunk MI	e Field Ser D 16 Inch	vices								
Sample ID	MB-25994	SampT	ype: M	BLK	Tes	tCode: É	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: 25	994	RunNo: 35223						
Prep Date:	6/22/2016	Analysis D	ate: 6	27/2016	5	eqNo: 1	089084	Units: mg/k	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e Organics (GRO)	ND	5.0								
Surr: BFB		990		1000		99.1	80	120			
Sample ID	LCS-25994	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: 25	994	F	RunNo: 3	5223				
Prep Date:	6/22/2016	Analysis D	ate: 6/	27/2016	S	SeqNo: 1	089085	Units: mg/M	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e Organics (GRO)	28	5.0	25.00	0	111	80	120			
Surr: BFB		1100		1000		109	80	120			
Sample ID	1606B73-001AMS	SampT	ype: MS	S	Tes	Code: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	SR SC-1	Batch	ID: 25	994	F	unNo: 3	5223				
Prep Date:	6/22/2016	Analysis D	ate: 6/	27/2016	5	eqNo: 1	089087	Units: mg/M	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e Organics (GRO)	24	5.0	24.80	0	96.5	59.3	143			
Surr: BFB		1100		992.1		107	80	120			
Sample ID	1606B73-001AMSI	D SampT	ype: MS	SD	Tes	Code: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	SR SC-1	Batch	ID: 25	994	F	unNo: 3	5223				
Prep Date:	6/22/2016	Analysis D	ate: 6/	27/2016	s	eqNo: 1	089088	Units: mg/K	g		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	e Organics (GRO)	25	4.8	24.06	0	103	59.3	143	3.16	20	
Surr: BFB		1000		962.5		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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 6 of 13

Enterprise Field Services

Project: 1	Frunk MD 16 Inch								
Sample ID MB-2599	4 SampType: M	BLK	Tes	tCode: El	,				
Client ID: PBS	Batch ID: 2	5994	F	RunNo: 3					
Prep Date: 6/22/20	16 Analysis Date: 6	/27/2016	S	SeqNo: 1	089121	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								
					and the second se				
Surr: 4-Bromofluorobenz	ene 0.97	1.000		96.8	80	120			
Surr: 4-Bromofluorobenz Sample ID LCS-259			Tes			120 8021B: Volat	tiles		
		CS			PA Method		tiles		
Sample ID LCS-259	94 SampType: L Batch ID: 2	CS 5994	F	tCode: El	PA Method 5223				
Sample ID LCS-259 Client ID: LCSS	94 SampType: L Batch ID: 2	CS 5994 5/27/2016	F	tCode: El	PA Method 5223	8021B: Volat		RPDLimit	Qual
Sample ID LCS-259 Client ID: LCSS Prep Date: 6/22/20 Analyte	94 SampType: Lu Batch ID: 24 16 Analysis Date: 6	CS 5994 5/27/2016 SPK value	F	tCode: El RunNo: 3 SeqNo: 1	PA Method 5223 089124	8021B: Volat Units: mg/K	g	RPDLimit	Qual
Sample ID LCS-259 Client ID: LCSS Prep Date: 6/22/20 Analyte	94 SampType: Lu Batch ID: 24 16 Analysis Date: 6 Result PQL	CS 5994 5/27/2016 SPK value 1.000	F S SPK Ref Val	tCode: El RunNo: 3 SeqNo: 10 %REC	PA Method 5223 089124 LowLimit	8021B: Volat Units: mg/K HighLimit	g	RPDLimit	Qual
Sample ID LCS-259 Client ID: LCSS Prep Date: 6/22/20 Analyte Benzene Toluene	94 SampType: Lu Batch ID: 24 16 Analysis Date: 6 Result PQL 1.1 0.025	CS 5994 5/27/2016 SPK value 1.000 1.000	F S SPK Ref Val 0	tCode: El RunNo: 3 SeqNo: 10 %REC 106	PA Method 5223 089124 LowLimit 75.3	8021B: Volat Units: mg/K HighLimit 123	g	RPDLimit	Qual
Sample ID LCS-259 Client ID: LCSS Prep Date: 6/22/20 Analyte Benzene	94 SampType: Lt Batch ID: 2: 16 Analysis Date: 6 16 Result PQL 1.1 0.025 1.1 0.050	CS 5994 5/27/2016 SPK value 1.000 1.000 1.000	F S SPK Ref Val 0 0	tCode: El RunNo: 3 SeqNo: 10 %REC 106 108	PA Method 5223 089124 LowLimit 75.3 80	8021B: Volat Units: mg/K HighLimit 123 124	g	RPDLimit	Qual

Qualifiers:

Client:

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

- Page 7 of 13

14-Jul-16

Client: Enterprise Field Services

Project: Trunk MD 16 Inch

Sample ID rb	SampT	ype: MI	BLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch	n ID: A3	5244	F	unNo: 3	35244				
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
Benzene	ND	1.0								
oluene	ND	1.0								
thylbenzene	ND	1.0								
Nethyl tert-butyl ether (MTBE)	ND	1.0								
,2,4-Trimethylbenzene	ND	1.0								
,3,5-Trimethylbenzene	ND	1.0								
,2-Dichloroethane (EDC)	ND	1.0								
,2-Dibromoethane (EDB)	ND	1.0								
laphthalene	ND	2.0								
-Methylnaphthalene	ND	4.0								
-Methylnaphthalene	ND	4.0								
cetone	ND	10								
romobenzene	ND	1.0								
romodichloromethane	ND	1.0								
bromoform	ND	1.0								
romomethane	ND	3.0								
-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								
-Chlorotoluene	ND	1.0								
-Chlorotoluene	ND	1.0								
is-1,2-DCE	ND	1.0								
is-1,3-Dichloropropene	ND	1.0								
,2-Dibromo-3-chloropropane	ND	2.0								
bioromochloromethane	ND	1.0								
bibromomethane	ND	1.0								
,2-Dichlorobenzene	ND	1.0								
,3-Dichlorobenzene	ND	1.0								
,4-Dichlorobenzene	ND	1.0								
ichlorodifluoromethane	ND	1.0								
1-Dichloroethane	ND	1.0								
,1-Dichloroethene	ND	1.0								
,2-Dichloropropane	ND	1.0								
,3-Dichloropropane	ND	1.0								
,		1.0								

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

Page 8 of 13

WO#: 1606B73

14-Jul-16

Client: Enterprise Field Services

Project: Trunk MD 16 Inch

Sample ID' rb	SampTyp	be: MB	LK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch I	D: A35	5244	R	unNo: 3	5244					
Prep Date:	Analysis Dat	te: 6/2	7/2016	S	eqNo: 1	089953	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
1-Dichloropropene	ND	1.0									
exachlorobutadiene	ND	1.0									
Hexanone	ND	10									
opropylbenzene	ND	1.0									
Isopropyltoluene	ND	1.0									
Methyl-2-pentanone	ND	10									
ethylene Chloride	ND	3.0									
Butylbenzene	ND	3.0									
Propylbenzene	ND	1.0									
c-Butylbenzene	ND	1.0									
yrene	ND	1.0									
rt-Butylbenzene	ND	1.0									
1,1,2-Tetrachloroethane	ND	1.0									
1,2,2-Tetrachloroethane	ND	2.0									
etrachloroethene (PCE)	ND	1.0									
ans-1,2-DCE	ND	1.0									
ans-1,3-Dichloropropene	ND	1.0									
2,3-Trichlorobenzene	ND	1.0									
2,4-Trichlorobenzene	ND	1.0									
1,1-Trichloroethane	ND	1.0									
1,2-Trichloroethane	ND	1.0									
ichloroethene (TCE)	ND	1.0									
ichlorofluoromethane	ND	1.0									
2,3-Trichloropropane	ND	2.0									
nyl chloride	ND	1.0									
lenes, 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	SampTyp	e: LCS	3	Test	Code: E	PA Method	8260B: VOLA	ATILES			
Client ID: LCSW	Batch II				unNo: 3						

%RPD RPDLimit Qual	
	%RPD RPDLimit Qual

Qualifiers:

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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- S % Recovery outside of range due to dilution or matrix
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WO#: 1606B73

14-Jul-16

Page 9 of 13

Client: Enterprise Field Services

Project: Trunk MD 16 Inch

Sample ID 100ng Ics		ype: LC			TestCode: EPA Method 8260B: VOLATILES					
Client ID: LCSW	Batch	ID: A3	5244	RunNo: 35244						
Prep Date:	Analysis D	Analysis Date: 6/27/2016 SeqNo: 1089954 Units: μg/L					Units: 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)	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
- Н 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 S
- B Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL **Reporting Detection Limit**
- Sample container temperature is out of limit as specified W

Page 10 of 13

1606B73 14-Jul-16

WO#:

Client:	Enterprise	e Field Serv	vices								
Project:	Trunk MI	D 16 Inch									
Sample ID	MB-26037	SampTy	pe: M	BLK	Tes	tCode: E	PA Method	7471: Mercu	v		
Client ID:	PBS		ID: 26			RunNo: 3					
								11-11-1			
Prep Date:	6/23/2016	Analysis Da	ate: 6	/24/2016	5	SeqNo: 1	088910	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
ury		ND	0.033								
Sample ID	LCS-26037	SampTy	pe: LC	s	Tes	tCode: E	PA Method	7471: Mercu	у		
Client ID:	LCSS	Batch	ID: 26	037	F	RunNo: 3	5191				
Prep Date:	6/23/2016	Analysis Da	ate: 6	/24/2016	S	SeqNo: 1	088911	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.17	0.033	0.1667	0	102	80	120			
worddry		0.17	0.000	0.1007	0	102	00	120			
	1606B73-001AMS	SampTy						7471: Mercur	γ		
	1606B73-001AMS SR SC-1	SampTy		S	Tes		PA Method		у		
Sample ID	SR SC-1	SampTy	/pe: M	S 6037	Tes	tCode: El	PA Method 5191		-		
Sample ID Client ID:	SR SC-1	SampTy Batch	/pe: M	S 037 /24/2016	Tes	tCode: El RunNo: 3 SeqNo: 1	PA Method 5191	7471: Mercur	-	RPDLimit	Qual
Sample ID Client ID: Prep Date:	SR SC-1	SampTy Batch Analysis Da	pe: M: ID: 26 ate: 6/	S 037 /24/2016	Tes F	tCode: El RunNo: 3 SeqNo: 1	PA Method 5191 088913	7471: Mercur Units: mg/K	g	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte xury	SR SC-1	SampTy Batch Analysis Da Result 0.17	rpe: M3 ID: 26 ate: 6/ PQL 0.032	S 1037 1/24/2016 SPK value 0.1620	Tes F S SPK Ref Val 0.003284	tCode: El RunNo: 3 SeqNo: 1 %REC 103	PA Method 5191 088913 LowLimit 75	7471: Mercur Units: mg/K HighLimit	g %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte xury	SR SC-1 6/23/2016	SampTy Batch Analysis Da Result 0.17 D SampTy	rpe: M3 ID: 26 ate: 6/ PQL 0.032	S 037 /24/2016 SPK value 0.1620 SD	Tes F SPK Ref Val 0.003284 Tes	tCode: El RunNo: 3 SeqNo: 1 %REC 103	PA Method 5191 088913 LowLimit 75 PA Method	7471: Mercur Units: mg/K HighLimit 125	g %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte xury Sample ID	SR SC-1 6/23/2016 1606B73-001AMSI SR SC-1	SampTy Batch Analysis Da Result 0.17 D SampTy	rpe: M3 ID: 26 Ate: 6/ PQL 0.032 rpe: M3 ID: 26	S 6037 /24/2016 SPK value 0.1620 SD 6037	Tes SPK Ref Val 0.003284 Tes F	tCode: El RunNo: 3 SeqNo: 1 %REC 103 tCode: El	PA Method 5191 088913 LowLimit 75 PA Method 5191	7471: Mercur Units: mg/K HighLimit 125	g %RPD y	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte xury Sample ID Client ID:	SR SC-1 6/23/2016 1606B73-001AMSI SR SC-1	SampTy Batch Analysis Da Result 0.17 D SampTy Batch	rpe: M3 ID: 26 Ate: 6/ PQL 0.032 rpe: M3 ID: 26	S 6037 /24/2016 SPK value 0.1620 SD 6037 /24/2016	Tes SPK Ref Val 0.003284 Tes F	tCode: El RunNo: 3 SeqNo: 1 %REC 103 tCode: El RunNo: 3	PA Method 5191 088913 LowLimit 75 PA Method 5191	7471: Mercur Units: mg/K HighLimit 125 7471: Mercur	g %RPD y	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 11 of 13

1606B73 14-Jul-16

WO#:

QC SUMMA Hall Environn				orv. Inc.					WO#:	1606B73 <i>14-Jul-16</i>
Client: En	terprise Field Ser unk MD 16 Inch									
Sample ID MB-26038	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	6010B: Soil	Metals		ž -
Client ID: PBS	Batch	n ID: 26	038	F	RunNo: 3	5227				
Prep Date: 6/23/2016	Analysis D	Date: 6/	27/2016	S	SeqNo: 1	089173	Units: mg/M	٢g		
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	s SampT	ype: LC	s	Tes	tCode: E	PA Method	6010B: Soil	Metals		
Client ID: LCSS	Batch	h ID: 26	038	F	RunNo: 3	5227				
Prep Date: 6/23/2016	Analysis D	ate: 6/	27/2016	5	SeqNo: 1	089174	Units: mg/K	g		
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 1606B73-0	01AMS SampT	ype: MS	6	Tes	tCode: E	PA Method	6010B: Soil I	Metals		
Client ID: SR SC-1	Batch	n ID: 26	038	F	RunNo: 3	5227				
Prep Date: 6/23/2016	Analysis D)ate: 6/	27/2016	5	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 1606B73-0	01AMSD SampT	ype: MS	SD	Tes	tCode: E	PA Method	6010B: Soil I	Metals		

							the second s				
Sample ID	LCS-26038	SampType: LCS TestCode: EPA Method 6010B: Soil Metals									
Client ID:	LCSS	Batch	ID: 26	038	R	tunNo: 3	5227				
Prep Date:	6/23/2016	Analysis D	ate: 6/	27/2016	S	eqNo: 1	089174	Units: mg/k	g		
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 SampType: MS TestCode: EPA Method 6010B: Soil Metals											
Client ID:	SR SC-1	Batch	D: 26	038	R	unNo: 3	5227				
Prep Date:	6/23/2016	Analysis D	ate: 6/	27/2016	S	eqNo: 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 1606B73-001AMSD SampType: MSD TestCode: EPA Method 6010B: Soil Metals											
Sample ID	1000D/3-001AM3	D Sampi	ype: MS	5D	Test	Code: El	PA Method	6010B: Soil	Metals		
			ype: MS 1D: 26			Code: El		6010B: Soil	Vietals		
Client ID:			1D: 26	038	R		5227	6010B: Soil I Units: mg/K			
Client ID:	SR SC-1	Batch	1D: 26	038 27/2016	R	unNo: 3	5227			RPDLimit	Qual
Client ID: Prep Date: Analyte	SR SC-1	Batch Analysis D	ate: 6/	038 27/2016	R	tunNo: 3 SeqNo: 1	5227 089278	Units: mg/k	ig	RPDLimit 20	Qual
Client ID: Prep Date:	SR SC-1	Batch Analysis D Result	n ID: 26	038 27/2016 SPK value	R S SPK Ref Val	unNo: 3 eqNo: 1 %REC	5227 089278 LowLimit	Units: mg/K HighLimit	g %RPD		Qual

Qualifiers:

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

E Value above quantitation range

- J Analyte detected below quantitation limits
 - Sample pH Not In Range
- RL **Reporting Detection Limit**

P

Sample container temperature is out of limit as specified W

Page 12 of 13

Enterprise Field Services

Client:

RPD outside accepted recovery limits R

Qualifiers: *

D

S % Recovery outside of range due to dilution or matrix

Value exceeds Maximum Contaminant Level.

W

В	Analyte detected	in the associated	Method Blank
---	------------------	-------------------	--------------

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range RL **Reporting Detection Limit**
- Sample container temperature is out of limit as specified

Project:	Trunk MI	D 16 Inch									
Sample ID	1606B73-001AMS	SampT	ype: MS	S '	Test	tCode: E	PA Method	6010B: Soil	Metals		
Client ID:	SR SC-1	Batch	ID: 26	038	R	RunNo: 3	5332				
Prep Date:	6/23/2016	Analysis D	ate: 6/	30/2016	S	eqNo: 1	093135	Units: mg/K	g		
Analyte	8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
A c		26	2.5	24.81	6.922	77.0	75	125			
Barium		61	0.099	24.81	45.48	60.7	75	125			S
l		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: 26	038	R	RunNo: 3	5332				
Prep Date:	6/23/2016	Analysis D	ate: 6/	30/2016	S	eqNo: 1	093136	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
A ;		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
		24	0.25	25.14	3.701	80.3	75	125	2.33	20	
5 m		21	2.5	25.14	0	83.6	75	125	2.56	20	
					-						
Sample ID	1606B73-001APS	SampT	ype: PS				PA Method	6010B: Soil I	Metals		
Sample ID Client ID:				5	Test			6010B: Soil I	Wetals		
			ype: PS	038	Test	tCode: El		6010B: Soil I Units: mg/K			

0.099 24.82 45.48 109 80 120 Barium 73

WO#: 1606B73

14-Jul-16

Page 13 of 13

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Albu TEL: 505-345-3975 Website: www.ha	4901 iquerque FAX: 50	Hawkins NE e. NM 87109 05-345-4107	Sam	ple Log-In Check List
Client Name: Enterprise	Work Order Number:	1606E	373		RcptNo: 1
Received by/date: LM	06/21/16				
Logged By: Joe Archuleta	6/21/2016 8:00:00 AM		are t	(: let (: let	
Completed By: Joe Archuleta Reviewed By: A.J	6/21/2016 3:04:21 PM 6 (21 /16			(its	
Chain of Custody					
1. Custody seals intact on sample be	ottles?	Yes	[7]	No	Not Present
2. Is Chain of Custody complete?		Yes		No []	Not Present
3. How was the sample delivered?		Cour	ier		
Log In					
4. Was an attempt made to cool the	samples?	Yes	*	Noll	NA []
5. Were all samples received at a te	mperature of >0° C to 6.0°C	Yes		No [7]	NAII
6. Sample(s) in proper container(s)?	,	Yes		No []	
7. Sufficient sample volume for indic	cated test(s)?	Yes		No [.]	
8. Are samples (except VOA and Of	IG) 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 reco	eived broken?	Yes		No 🛃	# of preserved bottles checked
12. Does paperwork match bottle lab (Note discrepancies on chain of c		Yes		No	for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified o		Yes		No	Adjusted?
14. Is it clear what analyses were req		Yes		No []]	
15. Were all holding times able to be (If no, notify customer for authoriz		Yes		No [_]	Checked by:
Special Handling (if applicab	<u>le)</u>				
16. Was client notified of all discrepan	ncies with this order?	Yes		No [.]	NA 😥
Person Notified:	Date		and have been der stefnissen, a	la i Mikdii in Akusia. 4	
By Whom:	Via:	[] eMa	ail [⁻] Phor	ne 📋 Fax	[]] In Person
Regarding:	ale konstruktur i international opper opper opper international and the second and the second and the second an The population of the second and the second and the second and the second second second second second second se	urb of oracia islation	ilt id mit beiter beiter der der der der der der der der der d	e men at little nu i- d'in at Mar mar d	n yð nýnga fra hafna segneg segne sem sem sem sem sem skall fræst til sem s Nara flasanda se til skalans fland um til far salar af skall hefti sem sem se
Client Instructions:					
17. Additional remarks:					

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.5	Good	Yes			

Chain-of-Custody Record ent: Enterprise Products Operating Ming Acdress: 614 Reilly Arc.	Project Name: Truck MD 16 Jack	4901 Hawkins NE - Albuquerque, NM 87109						
Semington, Nim 87401	Project #:	Tel. 505-345-3975 Fax 505-345-4107 Analysis Request						
ail or Fax#: Glorg & Cprod Corr Package: Standard	Project Manager: Thomas Long							
NELAP Other	Sampler: 75 On Ice: U Yes U No Sample Temperature: 3, 5							
EDD (Type) ate Time Matrix Sample Request ID	Container Type and # Preservative Type HEAL No. 1606 B13	BTEX + MTBE + TMB's (802'1) BTEX + MTBE + TPH (Gas only) TPH 8015B (GRO / DRO #MRO TPH (Method 504.1) 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) 270 (Semi-VOA)						
16 1330 Soil SR SC-1	402 Jer cool -001	XXXX						
16 DOS LOCAX SR LOS-2	2 voa's Hoydy -002							
e: Time Relinquished by. 16 June Relinquished by:	Received by: Date Time	Remarks:						



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

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1606B27 Date Reported: 6/29/2016

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Hall Environmental Analysis Laboratory, Inc.

Analyses		Result	PQL Q	ual Units	DF Date Analyzed	Batch
Lab ID:	1606B27-001	Matrix:	SOIL	Received	Date: 6/21/2016 8:00:00 AM	[
Project:	Trunk MD 16" Hydro			Collection	Date: 6/20/2016 10:50:00 Al	M
CLIENT:	APEX TITAN			Client Samp	ole ID: FP-1	

EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	6/24/2016 5:02:07 AM	26042
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	6			Analyst	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 RANG	E				Analyst	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					Analyst	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

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

Analytical Report Lab Order 1606B27

Date Reported: 6/29/2016

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: APEX TITAN
 Client Sample ID: FP-2

 Project:
 Trunk MD 16" Hydro
 Collection Date: 6/20/2016 11:00:00 AM

 Lab ID:
 1606B27-002
 Matrix: SOIL
 Received Date: 6/21/2016 8:00:00 AM

 Analyses
 Result
 PQL
 Qual
 Units
 DF
 Date Analyzed
 Batch

EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	6/24/2016 5:14:31 AM	26042
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	5			Analyst	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 RANG	E				Analyst	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					Analyst	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

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

Analytical Report 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					Analyst	LGT
Chloride	ND	30	mg/Kg	20	6/24/2016 11:50:52 AM	26073
EPA METHOD 8015M/D: DIESEL RANGI	E ORGANICS				Analyst	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 RANG	E				Analyst	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					Analyst	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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 9
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	w	Sample container temperature is out of limit as specified

Analytical Report 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
 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	ND	30	mg/Kg	20	6/24/2016 12:28:05 PM	26073
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	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 RANG	E				Analyst	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					Analyst	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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	Н	Holding times for preparation or analysis exce

- H Holding times for preparation or analysis exceededND 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

WO#: 1606B27

29-Jun-16

Hall Environmental	Analysis	Laboratory,

Client:	APEX TITAN			
Project:	Trunk MD 16" Hydro			

Sample ID MB-26042	SampType: MBLK	TestCode: EPA Method	300.0: Anions	,
Client ID: PBS	Batch ID: 26042	RunNo: 35149		
Prep Date: 6/23/2016	Analysis Date: 6/23/2016	SeqNo: 1087334	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID LCS-26042	SampType: LCS	TestCode: EPA Method	300.0: Anions	
Client ID: LCSS	Batch ID: 26042	RunNo: 35149		
Prep Date: 6/23/2016	Analysis Date: 6/23/2016	SeqNo: 1087335	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	14 1.5 15.00	0 93.6 90	110	
Sample ID MB-26073	SampType: MBLK	TestCode: EPA Method	300.0: Anions	
Sample ID MB-26073 Client ID: PBS	SampType: MBLK Batch ID: 26073	TestCode: EPA Method RunNo: 35186	300.0: Anions	
			300.0: Anions Units: mg/Kg	
Client ID: PBS Prep Date: 6/24/2016	Batch ID: 26073 Analysis Date: 6/24/2016	RunNo: 35186		RPDLimit Qual
Client ID: PBS Prep Date: 6/24/2016 Analyte	Batch ID: 26073 Analysis Date: 6/24/2016	RunNo: 35186 SeqNo: 1088718	Units: mg/Kg	RPDLimit Qual
Client ID: PBS Prep Date: 6/24/2016 Analyte	Batch ID: 26073 Analysis Date: 6/24/2016 Result PQL SPK value	RunNo: 35186 SeqNo: 1088718	Units: mg/Kg HighLimit %RPD	RPDLimit Qual
Client ID: PBS Prep Date: 6/24/2016 Analyte Chloride	Batch ID: 26073 Analysis Date: 6/24/2016 Result PQL SPK value ND 1.5	RunNo: 35186 SeqNo: 1088718 SPK Ref Val %REC LowLimit	Units: mg/Kg HighLimit %RPD	RPDLimit Qual
Client ID: PBS Prep Date: 6/24/2016 Analyte Chloride Sample ID LCS-26073	Batch ID: 26073 Analysis Date: 6/24/2016 Result PQL SPK value ND 1.5 SampType: LCS	RunNo: 35186 SeqNo: 1088718 SPK Ref Val %REC LowLimit TestCode: EPA Method	Units: mg/Kg HighLimit %RPD	RPDLimit Qual
Client ID: PBS Prep Date: 6/24/2016 Analyte Chloride Sample ID LCS-26073 Client ID: LCSS	Batch ID: 26073 Analysis Date: 6/24/2016 Result PQL SPK value ND 1.5 SampType: LCS Batch ID: 26073 Analysis Date: 6/24/2016	RunNo: 35186 SeqNo: 1088718 SPK Ref Val %REC LowLimit TestCode: EPA Method RunNo: 35186	Units: mg/Kg HighLimit %RPD 300.0: Anions	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 5 of 9

QC SUMMARY REPORT

WO#: 1606B27

29-Jun-16

Client: APEX TITAN **Project:** 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: Analysis Date: 6/23/2016 Units: mg/Kg 6/20/2016 SeqNo: 1086562 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte 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 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 %REC %RPD RPDLimit Result PQL SPK value SPK Ref Val LowLimit HighLimit Analyte Qual 38 **Diesel Range Organics (DRO)** 10 50.00 0 75.2 62.6 124 Surr: DNOP 4.4 5.000 87.1 70 130

Qualifiers:

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- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
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Page 6 of 9

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1606B27

29-Jun-16

Client: Project:	APEX TI Trunk MI	TAN D 16" Hydr	ro								
Sample ID	MB-25976	SampTy	pe: MI	BĽK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	ė	
Client ID:	PBS	Batch	ID: 25	976	F	RunNo: 3	5097				
Prep Date:	6/21/2016	Analysis Da	ate: 6	/22/2016	5	SeqNo: 1	085943	Units: mg/M	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	e Organics (GRO)	ND	5.0	Of IX value	OF INTRO Var	MILLO	LOWLINK	riigiteittit	7011110	IN DEIM	QUUI
Surr: BFB		1000		1000		101	80	120			
Sample ID	1606B27-002AMS	SampTy	ne M	9	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	0	
Client ID:			ID: 25			RunNo: 3		0015D. 0ast	nine Rang		
								Linito: ma/li	-		
Prep Date:	012112010	Analysis Da				SeqNo: 1		Units: mg/K	-		
Analyte		Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
•	e Organics (GRO)	23	5.0	24.83	0	94.2	59.3	143			
Surr: BFB		1100		993.0		106	80	120			
Sample ID	1606B27-002AMSI	D SampTy	pe: MS	SD	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID:	FP-2	Batch	ID: 25	976	F	RunNo: 3	5097				
Prep Date:	6/21/2016	Analysis Da	ate: 6/	22/2016	5	SeqNo: 1	085948	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e 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	SampTy	pe: LC	s	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: 25	976	F	RunNo: 3	5174				
Prep Date:	6/21/2016	Analysis Da	ate: 6/	25/2016	5	SeqNo: 1	088116	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	e Organics (GRO)	29	5.0	25.00	0	116	80	120	NIG D	TH DEITIN	Quui
Surr: BFB	,	1100		1000		107	80	120			
Sample ID	LCS-26055	SampTy	/pe: LC	s	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
	LCSS		ID: 26			RunNo: 3					
Prep Date:		Analysis Da	ate: 6/	25/2016		SeqNo: 1		Units: %Re			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1100		1000		107	80	120			
Sample ID	MB-26055	SampTy	/pe: MF	BLK	Tes	tCode: FI	PA Method	8015D: Gaso	line Rang	8	
Client ID:			ID: 26			RunNo: 3				-	
				25/2016		SeqNo: 1		Units: %Re			
Fiep Date.	6/24/2016	Allalysis Do									
Analyte	6/24/2016	Result	PQL		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
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
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- Е Value above quantitation range
- J Analyte detected below quantitation limits
 - Page 7 of 9
- Р Sample pH Not In Range RL **Reporting Detection Limit**
- W

Sample container temperature is out of limit as specified

Hall Environmenta	l Analysis	Laboratory,	Inc.
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WO#: 1606B27

29-Jun-16

APEX TITAN **Client: Project:** Trunk MD 16" Hydro Sample ID MB-25976 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: 25976 RunNo: 35097 Prep Date: 6/21/2016 Analysis Date: 6/22/2016 SeqNo: 1085953 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit Analyte Result PQL HighLimit %RPD **RPDLimit** Qual 0.025 Benzene ND ND 0.050 Toluene Ethylbenzene ND 0.050) es, Total ND 0.10 1.000 120 Surr: 4-Bromofluorobenzene 0.98 97 5 80 Sample ID LCS-25976 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 25976 RunNo: 35097 Prep Date: 6/21/2016 Analysis Date: 6/22/2016 SeqNo: 1085954 Units: mg/Kg %REC SPK value SPK Ref Val %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit 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 SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: FP-1 Batch ID: 25976 RunNo: 35097 Prep Date: 6/21/2016 Analysis Date: 6/22/2016 SeqNo: 1085956 Units: mg/Kg LowLimit Analyte Result PQL SPK value SPK Ref Val %REC 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 2.9 0.093 Xylenes, Total 2.786 0.01671 103 72.4 131 Surr: 4-Bromofluorobenzene 0.94 0.9285 101 80 120 Sample ID 1606B27-001AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Client ID: FP-1 Batch ID: 25976 RunNo: 35097 Prep Date: 6/21/2016 Analysis Date: 6/22/2016 SeqNo: 1085957 Units: mg/Kg 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

Qualifiers:

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- B Analyte detected in the associated Method Blank
- E Value above quantitation range

Sample pH Not In Range

- J Analyte detected below quantitation limits

Page 8 of 9

RL Reporting Detection Limit

Р

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

WO#: 1606B27

29-Jun-16

Hall Environmental Analysis Laboratory, Inc.

Client:	APEX TITAN
Project:	Trunk MD 16" Hydro

	,						
Sample ID LCS-26055	SampType: LCS	TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 26055	RunNo: 35174					
Prep Date: 6/24/2016	Analysis Date: 6/25/2016	SeqNo: 1088135 Units: %Rec					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
Surr: 4-Bromofluorobenzene	0.99 1.000	98.6 80	120				
Sample ID MB-26055	SampType: MBLK	TestCode: EPA Method	8021B: Volatiles				
Client ID: PBS	Batch ID: 26055	RunNo: 35174	RunNo: 35174				
Prep Date: 6/24/2016	Analysis Date: 6/25/2016	SeqNo: 1088136	Units: %Rec				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
Surr: 4-Bromofluorobenzene	0.94 1.000	94.4 80	120				

Qualifiers:

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- D Sample Diluted Due to Matrix
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- ND Not Detected at the Reporting Limit
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- 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
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 9 of 9

HALL ENVIRONMENTAL ANALYSIS LABORATORY	rtan Environmentas A Albuq TEL: 505-345-3973 F Website: www.hall	4901 puerqui UAX: 3	Hawkins NE 2, NM 87109 95-345-4107	San	nple Log-In	Check List
Client Name: APEX AZTEC	Work Order Numper:	16068	327		Rcpl	No: 1
Received by/date:	04/21/1	F				
Logged By: Ashley Gallegos	6/21/2016 8:00:00 AM			17		
Completed By: Ashley Gallegos	6/21/2016 10:13:59 AM		54	FF		
Reviewed By:	6121116			•		
Chain of Custody						
1. Custody seals intact on sample bottles?		Yes		No	Not Present	
2. Is Chain of Custody complete?		Yes	8	No	Not Present	[1]
3. How was the sample delivered?		Cour	ier			
Log In						
4. Was an attempt made to cool the samples?	,	Yes	×	No	NA	1
5. Were all samples received at a temperature	of >0° C to 6.0°C	Yes	\checkmark	No 🗌	NA	
6. Sample(s) in proper container(s)?		Yes		No		
7. Sufficient sample volume for indicated test(s	i)?	Yes		No		
8. Are samples (except VOA and ONG) proper	ly preserved?	Yes		No		
9. Was preservative added to bottles?		Yes		No 🖌	NA	
10. VOA vials have zero headspace?		Yes		No	No VOA Vials	\checkmark
11. Were any sample containers received broke	en?	Yes	\Box	No 🗹		
				1 -1	# of preserved bottles checke	d
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes	\checkmark	No	for 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		No 🗌		
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		No 🗌	Checked	by.
Special Handling (if applicable)						
16. Was client notified of all discrepancies with	this order?	Yes		No	NA	\checkmark
Person Notified:	Date					
By Whom:	Via:	eMa	il 🔄 Phone	Fa:	x In Person	_
Regarding:						-
Client Instructions: 17. Additional remarks:						
18. Cooler Information					1	
Cooler No Temp C Condition Se 1 4.8 Good Yes		eal Da	ite Sigr	led By	-	
					1	

Page 1 of 1

-																				C	HAIN UF	CUSTODY RECO
						Laboratory	Ho	III E	ivn	renn	M	ita	L	AN/ Rec			D	17		//	77	Lab use only Due Date:
/Al-	PEX					Address: _	A	bug	un	que	M	M	_				/ /	11		/	///	Temp. of coolers when received (C°): 4
Office	Location	nA	12-	ec,	MM			-					-				/ /	11	/	/		
						Contact:	A	Fre	em	an						/	7		/	/ /	//	
		V	6			Phone:			_				-			/	9			/		Page of
	ct Manag ar's Name	ger	NCI	m	mers.	PO/SO #: _ Sampler's Sign	atura								3		2	/ /	/	/	/ /	
RAY	nee De	, lide				Pm I	-11	1							877	E S	13	/ /	/	/ /	/ /	
Proj. No	O.	ecimity	Proje	ct Na	ame	vanue	NOY		No/T	pe of C	ontain	hers			-	A	N.	/ /	/ /	/ /	/	1
				Fru		16" Hydre	>							đ	COAL BIEV	570	4 Munidaes	/ /	/ /	/	/	
Matrix	Date	Time	CoEp	Grab	Identifying Ma	rks of Sample(s)	Start	End	VOA	AG	250 ml	Glass Jar	P/O		14		1			1		Sample ID (Lab Use Only)
5	6/20/16	1050			FF	2-1								X	x	×					1600	OBAT CCI
5		1100			Ff	2-2						1		X	X	X						-002
S		1110			Ff	2-3						1		X	Y	X						- 002
S	1	1120			FP	24						1		X	X	×						-004
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				/											_						1. 1. 1. 1	
						MARS																
						Deer Duck		Duch														
	uished by (Signature	mai		Date: 1	Time: Recei	100%		ature)			Date	: 1		me:		NOTES:					
Ka	uished by (hill				Time: Recei	ved av	Signa	ature)	(X	Z i Date	16		ne:	2		Bill-	to T	om	Long E	Strop
Relinqu	uished by (Signature)	1	1	Date:	Time: Recei	ved by:	(Signa	ature)			Date	:	Т	ime:						-	
Relinqu	uished by (Signature)		+	Date:	Time: Recei	ved by:	(Signa	ature)		-+	Date	: 1	Ť	ime:	-						

Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Lab Order 1606D44

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

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CLIENT: APEX TITAN Client Sample ID: RP-1 Collection Date: 6/23/2016 9:50:00 AM Project: Trunk MD 16" Hydro Lab ID: 1606D44-001 Matrix: SOIL Received Date: 6/24/2016 7:47:00 AM Analyses Result POL Qual Unite DF Date Analyzed

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	LGT
Chloride	1.5	1.5	mg/Kg	1	6/28/2016 12:54:41 AM	26092
EPA METHOD 8015M/D: DIESEL RANG					Analyst	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 RAN	GE				Analyst	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					Analyst	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

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

Qua	ifiers:	
-		

*

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

Analytical Report Lab Order 1606D44

Date Reported: 7/6/2016

6/27/2016 9:13:31 PM

6/27/2016 9:13:31 PM

6/27/2016 6:57:04 PM

1

1

1

1

1

1

1

1

1

25992

25992

26054

26054

26054

26054

26054

26054

26054

Analyst: NSB

Analyst: NSB

Hall Environmental Analysis Laboratory, Inc.

Diesel Range Organics (DRO)

Gasoline Range Organics (GRO)

EPA METHOD 8021B: VOLATILES

Surr: 4-Bromofluorobenzene

EPA METHOD 8015D: GASOLINE RANGE

Surr: DNOP

Surr: BFB

Benzene

Toluene

Ethylbenzene

Xylenes, Total

CLIENT:	APEX TITAN		(lient Samp	le ID: RP-2	
Project:	Trunk MD 16" Hydro			Collection	Date: 6/23/2016 10:00:00 AM	[
Lab ID:	1606D44-002	Matrix: SO	DIL	Received	Date: 6/24/2016 7:47:00 AM	λ.
Analyses		Result	PQL Qual	Units	DF Date Analyzed	Batch
EPA MET	THOD 300.0: ANIONS				Analys	st: LGT
Chloride		ND	1.5	mg/Kg	1 6/28/2016 1:19:31 AM	26092
EPA ME	HOD 8015M/D: DIESEL RA	NGE ORGANICS			Analys	st: TOM

10

4.7

70-130

80-120

0.023

0.047

0.047

0.094

80-120

mg/Kg

%Rec

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

ND

98.3

ND

96.2

ND

ND

ND

ND

91.6

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	w	Sample container temperature is out of limit as specified

Analytical Report

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 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 10:50:34 AM	26161
EPA METHOD 8015M/D: DIESEL RANG	E 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 RANG	BE .				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.

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 В
- E Value above quantitation range
- Analyte detected below quantitation limits Page 3 of 13 J
- Ρ Sample pH Not In Range
- RL **Reporting Detection Limit**
- Sample container temperature is out of limit as specified W

Analytical Report Lab Order 1606D44 Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Lab ID:

Project: Trunk MD 16" Hydro

1606D44-004

Client Sample ID: RP-4 Collection Date: 6/23/2016 10:20:00 AM Matrix: SOIL Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	6/29/2016 11:52:37 AM	26161
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	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 RANG	E				Analyst	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					Analyst	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

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

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- its Page 4 of 13
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Analytical Report Lab Order 1606D44

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: APEX TITAN
 Client Sample ID: RP-5

 Project:
 Trunk MD 16" Hydro
 Collection Date: 6/23/2016 10:30:00 AM

 Lab ID:
 1606D44-005
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

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 Date Applyzed
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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 RAN	GE ORGANICS	5			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	6/27/2016 10:19:06 PM	25992
Surr: DNOP	95.6	70-130	%Rec	1	6/27/2016 10:19:06 PM	25992
EPA METHOD 8015D: GASOLINE RAN	NGE				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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 5 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	w	Sample container temperature is out of limit as specified

Analytical Report Lab Order 1606D44

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Date Reported: 7/6/2016 **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 Qua	l 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 RANGE	ORGANIC	s			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 RANG	E				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.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detect

- 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 6 of 13 J
- Р Sample pH Not In Range
- RL **Reporting Detection Limit**

W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1606D44 Date Reported: 7/6/2016

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Hall Environmental Analysis Laboratory, Inc.

 CLIENT: APEX TITAN
 Client Sample ID: RP-7

 Project: Trunk MD 16" Hydro
 Collection Date: 6/23/2016 10:50:00 AM

 Lab ID: 1606D44-007
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

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 DE
 Date Analyzed
 B

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 RAN	GE ORGANICS	1			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 RAI	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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 7 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report 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
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

 Analyses
 Result
 POL
 Oual
 Units
 DF
 Date Analyzed
 Batch

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 12:42:15 PM	26161
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	5			Analys	t: 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 RAM	IGE				Analys	t: 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					Analys	t: 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

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

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

Value exceeds Maximum Contaminant Level.

- 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
QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1606D44

Page 9 of 13

06-Jul-16

Client: APEX TITAN Project: Trunk MD 16" Hydr

Project:	Trun	k MD 16" Hydro								
Sample ID	MB-26092	SampType: ME	LK	Tes	tCode: El	PA Method	300.0: Anion:	s		
Client ID:	PBS	Batch ID: 260	92	R	RunNo: 3	5241				
Prep Date:	6/27/2016	Analysis Date: 6/2	27/2016	S	eqNo: 1	089804	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID	LCS-26092	SampType: LC	s	Tes	tCode: E	PA Method	300.0: Anion:	5		
Client ID:	LCSS	Batch ID: 260	ID: 26092 RunNo: 35241							
Prep Date:	6/27/2016	Analysis Date: 6/2	27/2016	S	eqNo: 1	089805	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	94.7	90	110			
Sample ID	MB-26161	SampType: ME	LK	Tes	Code: El	PA Method	300.0: Anion:	5		
Client ID:	PBS	Batch ID: 261	161	R	unNo: 3	5326				
Prep Date:	6/30/2016	Analysis Date: 6/2	29/2016	S	eqNo: 1	092908	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID	LCS-26161	SampType: LC	s	Test	Code: El	PA Method	300.0: Anion:	5		
Client ID:	LCSS	Batch ID: 261	61	R	unNo: 3	5326				
Prep Date:	6/30/2016	Analysis Date: 6/2	29/2016	S	eqNo: 1	092909	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	95.1	90	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
- 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

WO#: 1606D44

06-Jul-16

Client:	APEX TI										
Project:	Trunk MI) 16" Hydr	0					M. 6900			
Sample ID	LCS-26058	SampTy	pe: LC	S	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID:	LCSS	Batch	ID: 26	058	F	RunNo: 3	5221				
Prep Date:	6/24/2016	Analysis Da	ate: 6/	27/2016	5	SeqNo: 1	089122	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Irganics (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	ate: 6/	27/2016		SeqNo: 1	089123	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	rganics (DRO)	ND	10								
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 Range	e Organics	
Client ID:	PBS	Batch	ID: 25	992	F	RunNo: 3	5221				
Prep Date:	6/22/2016	Analysis Da	ite: 6/	27/2016	5	SeqNo: 1	089257	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	organics (DRO)	ND	10								
Surr: DNOP		8.9		10.00		88.6	70	130			
Sample ID	LCS-25992	SampTy	pe: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	LCSS	Batch	ID: 25	992	RunNo: 35221						
Prep Date:	6/22/2016	Analysis Da	ite: 6/	27/2016	5	SeqNo: 1	089274	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	rganics (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	5	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	RP-8	Batch	ID: 26	058	F	RunNo: 3	5220				
Prep Date:	6/24/2016	Analysis Da	ite: 6/	27/2016	5	SeqNo: 1	089551	Units: mg/M	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	rganics (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	SampTy	pe: MS	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	RP-8	Batch	ID: 26	058	F	RunNo: 3	5220				
Prep Date:	6/24/2016	Analysis Da	te: 6/	27/2016	5	SeqNo: 1	090134	Units: mg/M	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
- 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 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.

Client: APEX TITAN

Project: Trunk MD 16" Hydro

Sample ID 1606D44-008AMSI	D SampTy	pe: MS	SD	Test	Code: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: RP-8	Batch	ID: 26	058	R	unNo: 3	5220				
Prep Date: 6/24/2016	Analysis Da	ite: 6/	27/2016	S	eqNo: 1	090134	Units: mg/k	(g		
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.
- 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 11 of 13

1606D44

WO#:

06-Jul-16

WO#: 1606D44

06-Jul-16

Client:	APEX TITAN
Project:	Trunk MD 16" Hydro

Појесс. Планкто	D IO IIJu										
Sample ID MB-26054	SampT	SampType: MBLK			tCode: EF	EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 26054			RunNo: 35243							
Prep Date: 6/24/2016	Analysis D	ate: 6/	27/2016	S	SeqNo: 10	089910	Units: mg/M	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	980		1000		97.6	80	120				
Sample ID LCS-26054	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e		
Client ID: LCSS	Batch	ID: 26	054	F	unNo: 3	5243					
Prep Date: 6/24/2016	Analysis D	ate: 6/	27/2016	S	SeqNo: 10	089911	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	80	120				
Surr: BFB	1100		1000		109	80	120				

Qualifiers:

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

Page 12 of 13

Hall Environmenta	l Analysis	Laborato	ory, Inc.	
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Client: APEX TITAN Project: Trunk MD 16" Hydro

-											
Sample ID MB-26054	SampT	ype: ME	3LK	Tes	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch	h ID: 26	054	F	RunNo: 35243						
Prep Date: 6/24/2016	Analysis D	Date: 6/	27/2016	S	SeqNo: 1	089938	Units: mg/M	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
е	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	SampT	ype: LC	S	Tes	tCode: E	PA Method	8021B: Volat	tiles			
Client ID: LCSS	Batch	h ID: 26	054	RunNo: 35243							
Prep Date: 6/24/2016	Analysis D	Date: 6/	27/2016	S	SeqNo: 1	089939	Units: mg/M	g			
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				
kylenes, Total	3.0	0.10	3.000	0	99.7	83.9	122				
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	80	120				

Qualifiers:

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

Page 13 of 13

06-Jul-16

WO#: 1606D44

ENVIRONMENTAL ANALYSIS LABORATORY		Hawkins NE e, NM 87109 05-345-4107	Sam	ple Log-In Check List
Client Name: APEX AZTEC Work	Order Number: 1606	044		RcptNo: 1
Received by/date: AT 06/24//6	·····			
Logged By: Anne Thome 6/24/20	16 7:47:00 AM		Ame Am	
Completed By: Anne Thome 6/24/201	16	/	Im Im	-
Reviewed By: 06/2	4/16			
Chain of Custody	.,.			
1. Custody seals intact on sample bottles?	Yes		No 🗆	Not Present
2. Is Chain of Custody complete?	Yes		No 🗌	Not Present
3. How was the sample delivered?	Cour	ier		
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	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 present	ved? Yes		No 🗌	
9. Was preservative added to bottles?	Yes		No 🗹	NA 🗆
10.VOA vials have zero headspace?	Yes		No 🗌	No VOA Vials
1. Were any sample containers received broken?	Yes		No 🗹	# of preserved
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes		No 🗆	bottles checked for pH: (<2 or >12 unless note
3. Are matrices correctly identified on Chain of Custody	? Yes	\checkmark	No 🗌	Adjusted?
4. Is it clear what analyses were requested?	Yes		No 🗌	
5. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes		No	Checked by:
pecial Handling (if applicable)				
6. Was client notified of all discrepancies with this order	? Yes		No 🗆	NA 🗹
Person Notified:	Date			
By Whom: Regarding:	Via: eMa	iil 🗌 Phor	e 🗌 Fax	In Person
Client Instructions:				
17. Additional remarks:				· · · · ·
8. <u>Cooler Information</u> Cooler No Temp °C Condition Seal Intact 1 2.4 Good Yes	Seal No Seal D	ate Siç	aned By	
Page 1 of 1				

				CHAIN OF CUSTODY RECO
	Laboratory: Hell Boy Address: ABQ, NO	renmental	ANALYSIS REQUESTED	Lab use only Due Date: 2. 1
	Address. Abcy 191			Temp, of coolers when received (C'):
Office Location Aztec, N.M.	Contraction of C		X	2 3 4
	Contact: A Freem	ur	17	Page of
	Phone:		BIEX TPLA COPOL	Page of
Project Manager K. Summur	where a set a set of the set of t		がまい	
ampler's Name	Sampler's Signature	1.1	Sols Hitx Sols TPH	-
Rance Deechilly Shally	+ dudechilly Z	12	5 L 2	
roj No. Project Name		Type of Containers	Ells. Cal	
	NK MD 16" Hydro		03	
latrx Date Time M a lot	entifying Marks of Samplers) to the De U	AlG 1L1 250 250 Jar PiO		Lab Sample ID (Lab Use Only
5 6123/14 950	RP-1	1	× × ≮	lecled 44-cel
5 1000	RP-2		XXX	-612
5 1010	RP-3		XXX	. 23
5 1020	RP-4		XXX	TUY
5 1030	RP-5		XXX	715
	RP-6	1	and a second	Tub
	to part an interference company company company company company	······	×.×.×.	
- 1050	RP-7		XXX	747
5 V 130	R9-8		XXX	ZUS
	NFS			
				• •
urn around time Normal 125%	Rush _ 50% Rush _ 100% Rush e: Time: Received by: (Sighatura)	Date:	Time. NOTES:	· · ·
urn around time Normal 125% Balinquished by (Signature) Dat	Rush _ 50% Rush _ 100% Rush e: Time: Reported by: (Sighature 3.16 1442 A: Wat UCL	I 10/23/14	1472	
Curn around time Normal 125% Balinquished by (Signature) Dat	Rush J 50% Rush J 100% Rush e: Time: Reprived by: (Sighature 3/16/19/42 / Allocat UCLU e: Time: / Reprived/by: (Signature			Tom Lony EPROD
Lurn around time Normal 125% selinquished by (Signature) Dat MI MUS 012 selinquished by (Signature) Dat Mustor Colley 1/2	Rush J 50% Rush J 100% Rush e: Time: Received by: (Sighature) 3 1/2 A: Just Lall e: Time: Received by: (Signature) 2 1/4 1/4	Z 6/23/14 Date: CC/24/6		Tom Lory EFRED
Turn around time Normal 125% Balinguished by (Signature) Dat CMULIUM Selinguished by (Signature) Dat Multur Colley 4/2	Rush J 50% Rush J 100% Rush e: Time: Received by: (Signature 3/16/14/42 A: Just UCLU e: Time: Received by: (Signature 2/14/18/44 UCLU Image: Signature 2/14/18/44 E: Time: Received by: (Signature	Z <u>6/13/1/-</u> Date: <u>CL/24/16</u> Date:	C747 Bill to	Tom Lory EFRED

Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204



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

OrderNo.: 1607041

Dear Kyle Summers:

RE: Trunk MD 16" Hydro

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 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
 Matrix: SOIL
 Received Date: 6/30/2016 8:05:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	7/8/2016 5:56:39 PM	26308
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	;			Analyst	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 RAN	GE				Analyst	: 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					Analyst	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

Qualifiers: *		Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	 H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits 		J	Analyte detected below quantitation limits Page 1 of 5
			Р	Sample pH Not In Range
			RL	Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix		% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

WO#: 1607041

14-Jul-16

Hall Environmenta	l Analysis	Laboratory,	Inc.
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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	RunNo: 35546		
Prep Date: 7/8/2016	Analysis Date: 7/8/2016	SeqNo: 1100588	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID LCS-26308	SampType: LCS	TestCode: EPA Method	300.0: Anions	
Sample ID LCS-26308 Client ID: LCSS	SampType: LCS Batch ID: 26308	TestCode: EPA Method RunNo: 35546	300.0: Anions	
			300.0: Anions Units: mg/Kg	
Client ID: LCSS	Batch ID: 26308 Analysis Date: 7/8/2016	RunNo: 35546		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 2 of 5

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

4.1

WO#: 1607041

14-Jul-16

APEX TITAN **Client: Project:** Trunk MD 16" Hydro Sample ID MB-26224 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 26224 RunNo: 35437 Units: mg/Kg Prep Date: 7/5/2016 Analysis Date: 7/6/2016 SeqNo: 1096560 SPK value SPK Ref Val %REC LowLimit %RPD Analyte Result PQL HighLimit **RPDLimit** Qual ND 10 **Diesel Range Organics (DRO)** Surr: DNOP 9.5 10.00 94.6 70 130 Sample ID LCS-26224 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 26224 RunNo: 35437 Prep Date: 7/5/2016 Analysis Date: 7/6/2016 SeqNo: 1096561 Units: mg/Kg SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result PQL LowLimit Qual Analyte 37 10 74.7 62.6 50.00 0 124 Range Organics (DRO)

82.6

70

130

5.000

Qualifiers:

Surr: DNOP

- * 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 3 of 5

WO#: 1607041

14-Jul-16

Hall Environmental A	Analysis	Labora	tory, l	Inc.
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Client: APEX TITAN **Project:**

Trunk MD 16" Hydro

Sample ID MB-26197	SampT	ype: ME	BLK	Tes	TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch	n ID: 26	197	F	RunNo: 3	5429				
Prep Date: 7/1/2016	Analysis D	ate: 7/	5/2016	S	SeqNo: 1	096243	Units: mg/k	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		95.8	80	120			
oun: Br B	300		1000		95.0	80	120			
Sample ID LCS-26197		ype: LC		Tes			8015D: Gaso	line Rang	e	
	SampT	ype: LC	S			PA Method		line Rang	6	
Sample ID LCS-26197	SampT	n ID: 26	:S 197	F	tCode: El	PA Method 5429			e	
Sample ID LCS-26197 Client ID: LCSS	SampT Batch	n ID: 26	S 197 5/2016	F	tCode: El RunNo: 3	PA Method 5429	8015D: Gaso		e RPDLimit	Qual
Sample ID LCS-26197 Client ID: LCSS Prep Date: 7/1/2016	SampT Batch Analysis D	n ID: 26 Date: 7/	S 197 5/2016	F	tCode: El RunNo: 3 SeqNo: 1	PA Method 5429 096244	8015D: Gaso Units: mg/K	g		Qual

Qualifiers:

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

Page 4 of 5

WO#: 1607041

Page 5 of 5

14-Jul-16

APEX TITAN **Client: Project:** Trunk MD 16" Hydro Sample ID MB-26197 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: 26197 RunNo: 35429 Prep Date: 7/1/2016 Analysis Date: 7/5/2016 SeqNo: 1096264 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual ND 0.025 Benzene ND 0.050 Toluene Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 0.95 1.000 94.6 80 120 TestCode: EPA Method 8021B: Volatiles Sample ID LCS-26197 SampType: LCS Client ID: LCSS Batch ID: 26197 RunNo: 35429 Prep Date: 7/1/2016 Analysis Date: 7/5/2016 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	

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY	tiau Environmental Alb TEL: 505-345-3975 Website: www.ha	4901 Hawk uquerque, NM FAX: 505-34	ins NE 87109 Sam 5-4107	ple Log-In C	heck List
Client Name: APEX AZTEC	Work Order Number	1607041		RcptNo:	1
Received by/date:	06 30 110				
Logged By: Lindsay Mangin	6/30/2016 8:05:00 AM	,	Julipo		
Completed By: Lindsay Mangin	7/1/2016 12:36:12 PM		A SHARED		
Reviewed By: QJ	71116		000		
Chain of Custody					
1. Custody seals intact on sample bottles?		Yes 🗌	No 🗆	Not Present	
2. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present	
3. How was the sample delivered?		Courier			
Log In					
4. Was an attempt made to cool the samples	?	Yes 🗹	No 🗌	NA 🗆	
5. Were all samples received at a temperatur	e of >0° C to 6.0°C	Yes 🗹	No 🗌		
6. Sample(s) in proper container(s)?		Yes 🗹	No 🗆		
7, Sufficient sample volume for indicated test	(s)?	Yes 🗹	No 🗌		
8. Are samples (except VOA and ONG) prope	rly 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 brok	en?	Yes	No 🗹	th of announced	
		-		# of preserved bottles checked	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No	for pH: (<2 o	r >12 unless note
13. Are matrices correctly identified on Chain of	f Custody?	Yes 🗹	No 🗆	Adjusted?	
14. Is it clear what analyses were requested?		Yes 🗹	No 🗌		
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗆	Checked by:	
Special Handling (If applicable) 16. Was client notified of all discrepancies with	this order?	Yes 🗌	No 🗆	na 🗹	
Person Notified:	Date]
By Whom:	Via:	eMail [Phone 🗌 Fax	In Person	
Regarding:					
Client Instructions:					
17. Additional remarks:					
18. Cooler Information					
	seal Intact Seal No	Seal Date	Signed By		
1 1.1 Good Ye	5				

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									(CHAIN OF (CUSTODY RECOP
A	Laboratory:	all Emi	nvonr	renta		NALYSIS	/ /	Π			Lab use only Due Date:
APEX	Address: Albug				-			' /	/ /		
Office Location Aztec, NM		ingal,			-		0	/ /	/ /		Temp. of coolers when received (C°):
	Contact: A, Fr	reemai	n				10	/ /	/		1 2 3 4 5
· ·	Phone:		·				0		/ /	/ / /	Pageof)
Project Manager KSummers	PO/SO #:				_	N	30	/			
ampler's Name	Sampler's Signature					E	ままし	/ /			
Rance Deechilly 2	RDahl	5				E I	78/	//			
roj. No. Project Name		No/Ty	ype of Con	tainers		Solar BIEN	Chlorides 10120	/ /	/ /		
Trunk MO	the second se	5 4			_	77	7//	/ /	/ /	/	
latrix Date Time C G m a P b	rks of Sample(s)	VOA	AG 1LL	Jar Jar	8	/ /		/ /	/	Lab S	ample ID (Lab Use Only)
5 6/29/16 0750 WP-	6			1	X	XX				160	7041 -001
									-		
	¥RS										
	50% Rush 🔲 100% Ru			1			1 1-1-1	1l.			
	Time: Received by: (S	Signature)		Date:	11 1		NOTES:		_		
elinquished by (Signature) Date:	Time: Received by: (S	ignature)		Date:		Time: 0805	Bu	to-	1sm	Long E	PROD
the second se	Time: Received by: (S			0 (a/ 7a/ Date:		Time:					
elinquished by (Signature) Date:	Time: Received by: (S	(anature)		Date:		Time:					
	Time. Received by. (S	ngriature)		Dale.		nine.					
atrix WW - Wastewater W - Water	S - Soil SD - Solid L -	Liquid A				l tube	SL - sludge	0 - Oil			

Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204

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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 06, 2016.

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

OrderNo.: 1606F25

RE: Trunk MD 16" Hydro

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

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

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

Sincerely,

Andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

Analyses		Result	POL Oual	Units	DF Date Analyzed	Ba
Lab ID:	1606F25-001	Matrix:	SOIL	Received	Date: 6/28/2016 8:00:00 AM	
Project:	Trunk MD 16" Hydro			Collection	Date: 6/27/2016 11:40:00 AM	
CLIENT:	APEX TITAN		(Client Samp	le ID: WP-1	

Result	PQL Qu	al Units	DF	Date Analyzed	Batch
				Analyst	LGT
ND	30	mg/Kg	20	7/1/2016 2:41:18 PM	26203
	5			Analyst	TOM
ND	9.8	mg/Kg	1	6/30/2016 10:20:04 AM	26153
90.5	70-130	%Rec	1	6/30/2016 10:20:04 AM	26153
ε				Analyst	NSB
ND	4.9	mg/Kg	1	6/29/2016 9:07:51 PM	26117
98.1	80-120	%Rec	1	6/29/2016 9:07:51 PM	26117
				Analyst	NSB
ND	0.024	mg/Kg	1	6/29/2016 9:07:51 PM	26117
ND	0.049	mg/Kg	1	6/29/2016 9:07:51 PM	26117
ND	0.049	mg/Kg	1	6/29/2016 9:07:51 PM	26117
ND	0.097	mg/Kg	1	6/29/2016 9:07:51 PM	26117
<mark>91.9</mark>	80-120	%Rec	1	6/29/2016 9:07:51 PM	26117
	ND E ORGANICS ND 90.5 SE ND 98.1 ND ND ND ND ND	ND 30 E ORGANICS ND 9.8 90.5 70-130 SE ND 4.9 98.1 80-120 ND 0.024 ND 0.049 ND 0.049 ND 0.049 ND 0.097	ND 30 mg/Kg E ORGANICS ND 9.8 mg/Kg 90.5 70-130 %Rec SE ND 4.9 mg/Kg 98.1 80-120 %Rec ND 0.024 mg/Kg ND 0.049 mg/Kg ND 0.049 mg/Kg ND 0.097 mg/Kg	ND 30 mg/Kg 20 E ORGANICS	Analyst ND 30 mg/Kg 20 7/1/2016 2:41:18 PM E ORGANICS Analyst ND 9.8 mg/Kg 1 6/30/2016 10:20:04 AM 90.5 70-130 %Rec 1 6/30/2016 10:20:04 AM SE Analyst ND 4.9 mg/Kg 1 6/29/2016 9:07:51 PM 98.1 80-120 %Rec 1 6/29/2016 9:07:51 PM Analyst ND 0.024 mg/Kg 1 6/29/2016 9:07:51 PM ND 0.049 mg/Kg 1 6/29/2016 9:07:51 PM Analyst ND 0.049 mg/Kg 1 6/29/2016 9:07:51 PM ND 0.097 mg/Kg 1 6/29/2016 9:07:51 PM

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

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITANClient Sample ID: WP-2Project:Trunk MD 16" HydroCollection Date: 6/27/2016 11:50:00 AMLab ID:1606F25-002Matrix: SOILReceived 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 3:18:32 PM	26203
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	5			Analys	TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	6/30/2016 11:49:23 AN	26153
Surr: DNOP	90.3	70-130	%Rec	1	6/30/2016 11:49:23 AN	26153
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	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	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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	н	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit

- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- 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

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
 POL Qual Units
 DF Date Analyzed
 Batch

Analyses	Result	TQL Qu	ai Units	Dr	Date Analyzeu	Daten
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	7/1/2016 3:30:57 PM	26203
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/30/2016 12:11:14 PM	26153
Surr: DNOP	97.6	70-130	%Rec	1	6/30/2016 12:11:14 PM	26153
EPA METHOD 8015D: GASOLINE RAN	GE				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	t: 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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 9
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1606F25

Date Reported: 7/6/2016

Hall Environmental Analysis Laboratory, Inc.

1

CLIENT: APEX TITAN Client Sample ID: WP-4 Trunk MD 16" Hydro Collection Date: 6/27/2016 12:10:00 PM **Project:** Lab ID: 1606F25-004 Matrix: SOIL Received Date: 6/28/2016 8:00:00 AM Result **PQL** Qual Units **DF** Date Analyzed Analyses Batch EDA METHOD 200 0: ANIONS Analyst LCT

EPA METHOD 300.0: ANIONS					Analyst:	LGT
Chloride	ND	30	mg/Kg	20	7/1/2016 3:43:21 PM	26203
EPA METHOD 8015M/D: DIESEL RANGE O	RGANI	cs			Analyst:	том
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/30/2016 12:33:00 PM	26153
Surr: DNOP	90.3	70-130	%Rec	1	6/30/2016 12:33:00 PM	26153
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/29/2016 10:18:25 PM	26117
Surr: BFB	101	80-120	%Rec	1	6/29/2016 10:18:25 PM	26117
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.025	mg/Kg	1	6/29/2016 10:18:25 PM	26117
Toluene	ND	0.049	mg/Kg	1	6/29/2016 10:18:25 PM	26117
Ethylbenzene	ND	0.049	mg/Kg	1	6/29/2016 10:18:25 PM	26117
Xylenes, Total	ND	0.098	mg/Kg	1	6/29/2016 10:18:25 PM	26117
Surr: 4-Bromofluorobenzene	94.8	80-120	%Rec	1	6/29/2016 10:18:25 PM	26117

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 9
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Date Reported: 7/6/2016

6/29/2016 10:41:55 PM 26117

6/29/2016 10:41:55 PM 26117

6/29/2016 10:41:55 PM 26117

6/29/2016 10:41:55 PM 26117

Hall Environmental Analysis Laboratory, Inc.

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

CLIENT: APEX TITAN Project: Trunk MD 16" Hydro		•	Client Sampl		P-5 27/2016 12:20:00 PM	
Lab ID: 1606F25-005	Matrix:	SOIL			28/2016 8:00:00 AM	
Analyses	Result	PQL Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	7/1/2016 3:55:46 PM	26203
EPA METHOD 8015M/D: DIESEL RANG		6			Analyst	TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/30/2016 12:55:02 PM	26153
Surr: DNOP	88.2	70-130	%Rec	1	6/30/2016 12:55:02 PM	26153
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	6/29/2016 10:41:55 PM	26117
Surr: BFB	97.8	80-120	%Rec	1	6/29/2016 10:41:55 PM	26117
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.025	mg/Kg	1	6/29/2016 10:41:55 PM	26117

0.050

0.050

0.10

80-120

mg/Kg

mg/Kg

mg/Kg

%Rec

1

1

1

1

ND

ND

ND

90.5

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 5 of 9
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

APEX TITAN **Client:**

Chener	
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	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID LCS-26203	SampType: LCS	TestCode: EPA Method	300.0: Anions	
Sample ID LCS-26203 Client ID: LCSS	SampType: LCS Batch ID: 26203	TestCode: EPA Method RunNo: 35411	300.0: Anions	
			300.0: Anions Units: mg/Kg	
Client ID: LCSS	Batch ID: 26203 Analysis Date: 7/1/2016	RunNo: 35411		RPDLimit Qual

Qualifiers:

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

Page 6 of 9

WO#: 1606F25

06-Jul-16

06-Jul-16

Client: Project:	APEX TI Trunk MI	TAN D 16" Hyd	ro								
Sample ID	LCS-26153	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: 26	153	F	RunNo: 3	5335				
Prep Date:	6/29/2016	Analysis D	ate: 6	/30/2016	S	SeqNo: 1	093643	Units: mg/l	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	51	10	50.00	0	103	62.6	124			
Surr: DNOP		4.6		5.000		<mark>91.0</mark>	70	130			
Sample ID	MB-26153	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: 26	153	F	RunNo: 3	5335				
Prep Date:	6/29/2016	Analysis D	ate: 6	/30/2016	s	SeqNo: 1	093644	Units: mg/l	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	ND	10								
Surr: DNOP		8.6		10.00		86.4	70	130			
Sample ID	1606F25-001AMS	SampT	ype: M	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	WP-1	Batch	ID: 26	153	F	RunNo: 3	5334				
Prep Date:	6/29/2016	Analysis D	ate: 6	/30/2016	S	SeqNo: 1	094441	Units: mg/H	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	43	9.6	48.03	2.386	84.6	33.9	141			
Surr: DNOP		4.2		4.803		86.6	70	130	2		
Sample ID	1606F25-001AMS	SampT	ype: MS	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	• Organics	
Client ID:	WP-1	Batch	ID: 26	153	F	RunNo: 3	5334				
1				0010040		Conblo: 4	004442	Units: mg/k	(
Prep Date:	6/29/2016	Analysis Da	ate: 6	30/2016	0	SeqNo: 1	094442	orinto. Ingri	\y		
Prep Date: Analyte	6/29/2016	Analysis Da	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte	6/29/2016 Drganics (DRO)	-						•	•	RPDLimit 20	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
 - Sample pH Not In Range
- RL Reporting Detection Limit

Р

W Sample container temperature is out of limit as specified

Page 7 of 9

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

C t: APEX TITAN

Sample ID MB-26117	SampT	Type: ME	BLK	Test	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch	h ID: 26	117	R	unNo: 3	5307				
Prep Date: 6/28/2016	Analysis D	Date: 6/	29/2016	S	eqNo: 10	92208	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.3	80	120			
	000		1000		33.5	00	120			
Sample ID LCS-26117		Type: LC		Test			8015D: Gaso	line Rang	0	
Sample ID LCS-26117 Client ID: LCSS	SampT	Гуре: LC h ID: 26	S			A Method		line Rang	9	
	SampT	h ID: 26	S	R	tCode: EF	PA Method			9	
Client ID: LCSS	Samp1 Batcl	h ID: 26	S 117 29/2016	R	tCode: EF	PA Method	8015D: Gaso		e RPDLimit	Qual
Client ID: LCSS Prep Date: 6/28/2016	SampT Batcl Analysis D	h ID: 26 Date: 6/	S 117 29/2016	R	tCode: EF RunNo: 38 SeqNo: 10	PA Method 5307 092209	8015D: Gaso Units: mg/K	g		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 9

1606F25

WO#:

06-Jul-16

Y REPORT

WO#: 1606F25

06-Jul-16

Hall Environmental Analysis Laboratory, Inc.

Client: Project:

APEX TITAN Trunk MD 16" Hydro

Sample ID MB-26117	SampT	ype: ME	BLK [']	Tes	tCode: E	PA Method	8021B: Volat	tiles		
Client ID: PBS	Batch	n ID: 26	117	F	RunNo: 3	5307				
Prep Date: 6/28/2016	Analysis D)ate: 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								
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	SampT	ype: LC	S	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	n ID: 26	117	R	RunNo: 3	5307				
Prep Date: 6/28/2016	Analysis D)ate: 6/	29/2016	S	eqNo: 1	092239	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.9	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	98.4	83.9	122			
Surr: 4-Bromofluorobenzene	0.98		1.000		97.9	80	120			

Qualifiers:

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

Page 9 of 9

ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-	onmental Analysis Laborator 4901 Hawkins N Albuquerque, NM 8710 345-3975 FAX: 505-345-410 s: www.hallenvironmental.com	sam	ple Log-In Ch	eck List
Client Name: APEX AZTEC Work Order	Number: 1606F25		RcptNo: 1	1
Received by/date:	28/10			
Logged By: Ashley Gallegos 6/28/2016 8:0	0:00 AM	AJ		
Completed By: Ashley Gallegos 6/28/2016 11;	51:34 AM	AZ		
Reviewed By: CL 28	16	•		
Chain of Custody				
1. Custody seals intact on sample bottles?	Yes	No 🗌	Not Present	
2. Is Chain of Custody complete?	Yes 🗹	No 🗌	Not Present	
3. How was the sample delivered?	Client			
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	
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 bottles checked	
12. Does paperwork match bottle labels?	Yes 🗹	No 🗆	for pH:	
(Note discrepancies on chain of custody)	Yes 🗹	No 🗔	(<2 or Adjusted?	>12 unless noted
13. Are matrices correctly identified on Chain of Custody? 14. Is it clear what analyses were requested?	Yes M Yes M			
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹		Checked by:	
Special Handling (if applicable)				
16. Was client notified of all discrepancies with this order?	Yes 🗌	No 🗌	NA 🗹	
Person Notified:	Date			
By Whom: Regarding:	Via: eMail Pho	one 🗌 Fax	In Person	
Client Instructions:				
17. Additional remarks:				
18. Cooler Information				
Cooler No Temp C Condition Seal Intact Sea	al No Seal Date S	igned By		
1 1.8 Good Yes	· · · · · · · · · · · ·			
Page 1 of 1				

Ranze Deschilly Resulty Resulty Notive of Containers Resulty Proj. No. Project Name Trunk (MO) 14 ¹¹ Hydro Notive of Containers Result Result Notive of Containers Result Re							CHAIN OF CUSTODY RECO
APEX Laboratory: Hall Environmantal HEQUESTED Office Location Arter Line Address: All Lang Ling U.C. INM Temp. of codes Office Location Arter Line Address: All Lang Ling U.C. INM Temp. of codes Project Manager KSMMMMUS Portex Arter Case Med. A Project Name Sempler's Name Sempler's Name Sempler's Name Sampler's Name Sempler's Name Sempler's Name NorType of Containers You NorType of Containers Trun // You NorType of Containers You NorType of Containers Trun // You NorType of Containers You NorType of Containers Trun // You NorType of Containers You NorType of Containers Trun // You NorType of Containers You NorType of Containers Trun // You NorType of Containers Set 1150 WP - 2 11 X X X -COOS Set 1200 WP - 3 11 X X X -COOS Set 1210 WP - 4 12 X X X -COOS You Med Trme Polycourd/byr,						1111	
APEX Address: Addres: Addres: Addre		Laboratory: Hall &	Invironme	ntal	REQUESTED /		
Office Location AZ42LLDIM Contact: AIFree Andel A Phone: Phone: Project Manager KSMMMUS Poiso #: Sempler's Signature Sampler's Name Sempler's Signature Trunk Kmolus: Project Manager Trunk Kmolus: Project Manager Yoo, No. Project Name Trunk Kmolus: NotType of Containers Yoo, No. Project Name Trunk Kmolus: NotType of Containers Yoo, No. Project Name Trunk Kmolus: NotType of Containers Yoo, No. Project Name Trunk Kmolus: NotType of Containers Yoo, No. Project Name Trunk Kmolus: NotType of Containers Yoo, No. Project Name Trunk Kmolus: NotType of Containers Yoo WP - 2 Yoo WP - 2 Yoo WP - 3 Yoo WP - 3 Yoo WP - 3 Yoo Yoo Yoo WP - 4 Yoo Project Name Mark of Big Rush Defres Rush Defres Project Rush Struck of Cignature) Defres Yoo Project Rush<	APEX					/ / / / /	
Sampler's Name Sampler's Signature Soft Hold					18		when received (C°):
Sampler's Name Sampler's Signature Soft Hold		Contact: A.F.	reamain		1 9		
Sampler's Name Sampler's Signature Soft Hold					0		Page
Sampler's Name Sampler's Signature Soft Hold	Project Manager KSUMMUS				「「」		
Note: Time: Control of the control	O	Question di materia					
Note: Note: <t< td=""><td>Range Deechilly -</td><td>Ripenhill</td><td>1</td><td></td><td>17.1</td><td></td><td></td></t<>	Range Deechilly -	Ripenhill	1		17.1		
Note: Note: <t< td=""><td>Proj. No. Project Name</td><td></td><td>No/Type of Conta</td><td>ainers</td><td>्रे री प</td><td></td><td></td></t<>	Proj. No. Project Name		No/Type of Conta	ainers	्रे री प		
S Get/liv IIYO WP-1 X X X ILDOUPF05_00 S IISO WP-2 I X X X -000 S I200 WP-3 I X X X -000 S I210 WP-4 I X X X -000 S I210 WP-4 I X X X -000 S I200 WP-5 I X X X -000		16" Hydro			7944	' / / / /	
S Get/liv IIYO WP-1 X X X ILDOUPF05_00 S IISO WP-2 I X X X -000 S I200 WP-3 I X X X -000 S I210 WP-4 I X X X -000 S I210 WP-4 I X X X -000 S I200 WP-5 I X X X -000	Matrix Date Time C G m r Identifying Ma	trks of Sample(s)	VOA 11LL	Jar P/O] / / / /		Lab Sample ID (Lab Use Only)
S 1150 WP-2 1 X X -008 S 1200 WP-3 1 X X -003 S 1210 WP-4 1 X X -003 S 1210 WP-4 1 X X -003 S 120 WP-5 1 X -005 March 100% Rush 100% Rush -005 -005 Date: Tme: Date: Time: V -005 March Date: Tme: Patel Time: -005 March Date: Tme: Patel Time: -007 March March Date: Time: -0100000000000				TT-	1 2 1	+ $+$ $+$ $+$	
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S 1210 WP-4 1 X -004 S 120 WP-5 1 X -005 120 WF-5 100% Rush 100% Rush -0005 120 Date: Time: Bellogicalure) Date: Time: 120 WF-100 Date: Time: Received by: (Signature) Date: Time: Relinquished by (Signature) Date: Time: Received by: (Signature) Date: Time: Relinquished by (Signature) <t< td=""><td></td><td></td><td></td><td>11-</td><td></td><td></td><td>-002</td></t<>				11-			-002
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NELO W PS I V S V S Normal 25% Rush 50% Rush 100% Rush Balinquished by (Signature) Date: Time: Date: Time: Aufinquished by (Signature) Date: Time: Received by: (Signature) Date: Time: Aufinquished by (Signature) Date: Time: Received by: (Signature) Date: Time: Aufinquished by (Signature) Date: Time: Received by: (Signature) Date: Time: Aufinquished by (Signature) Date: Time: Received by: (Signature) Date: Time: Relinquished by (Signature) Date: Time: Received by: (Signature) Date: Time: Relinquished by (Signature) Date: Time: Received by: (Signature) Date: Time: Relinquished by (Signature) Date: Time: Received by: Signature) Date: Time: Matrix WW - Wasterwater W - Water S - Soil SD - Soild L - Liquid A - Air Bag C - Charcoal tube SL - sludge O - Oil				1	XXX		-000
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Relinquished by (Signature) Date: Time: Received by: (Signature) Date: Time: Relinquished by (Signature) Date: Time: Received by: (Signature) Date: Time: Matrix WW - Wastewater W - Water S - Soil SD - Solid L - Liquid A - Air Bag C - Charcoal tube SL - sludge O - Oil	Relinguished, by (Signiture) Date:	Time: Received by: (\$igna	ature)	Date		1011110 101	ining creary
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Matrix WW - Wastewater W - Water S - Soil SD - Solid L - Liquid A - Air Bag C - Charcoal tube SL - sludge O - Oil		V					
	Relinquished by (Signature) Date:	Time: Received by: (Signa	ature)	Date:	Time:		
		S - Soil SD - Solid L - Liqui	d A - Air Bag			o - Oil	

Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204



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

OrderNo.: 1607083

Dear Kyle Summers:

RE: MD16 Hydro 5

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

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

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

Sincerely,

Andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 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
 POL
 Qual
 Units
 DF
 Date Analyzed

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 RANGE	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 RANG	E				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

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

Analytical Report Lab Order 1607083

7/7/2016 2:43:48 PM

7/7/2016 2:43:48 PM

7/6/2016 5:01:06 PM

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26260

26260

26229

26229

26229

26229

26229

26229

26229

Analyst: NSB

Analyst: NSB

Date Reported: 7/13/2016

Hall Environmental Analysis Laboratory, Inc.

Diesel Range Organics (DRO)

Gasoline Range Organics (GRO)

EPA METHOD 8021B: VOLATILES

Surr: 4-Bromofluorobenzene

EPA METHOD 8015D: GASOLINE RANGE

Surr: DNOP

Surr: BFB

Benzene

Toluene

Ethylbenzene

Xylenes, Total

CLIENT: APEX TITAN Client Sample ID: DP-2 **Project:** MD16 Hydro 5 Collection Date: 7/1/2016 8:50:00 AM 1607083-002 Received Date: 7/2/2016 10:15:00 AM Lab ID: Matrix: SOIL Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch EPA METHOD 300.0: ANIONS Analyst: LGT Chloride ND 30 ma/Ka 7/11/2016 10:04:40 PM 26315 20 EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: TOM

9.6

4.7

70-130

80-120

0.023

0.047

0.047

0.093

80-120

mg/Kg

%Rec

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

ND

87.6

ND

101

ND

ND

ND

ND

96.1

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

Analytical Report Lab Order 1607083

Date Reported: 7/13/2016

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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 Received Date: 7/2/2016 10:15:00 AM Matrix: SOIL - 1-I IIn . DOI 0 -.

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	A 26315
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	5			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 RA	NGE				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

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

Analytical Report

Lab Order 1607083

Date Reported: 7/13/2016

20 7/11/2016 10:54:19 PM 26315

7/7/2016 3:27:48 PM

7/7/2016 3:27:48 PM

7/6/2016 5:48:15 PM

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1

1

Analyst: TOM

Analyst: NSB

Analyst: NSB

26260

26260

26229

26229

26229

26229

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26229

26229

Hall Environmental Analysis Laboratory, Inc.

EPA METHOD 8015M/D: DIESEL RANGE ORGANICS

EPA METHOD 8015D: GASOLINE RANGE

Chloride

Surr: DNOP

Surr: BFB

Benzene

Toluene

Ethylbenzene

Xylenes, Total

Diesel Range Organics (DRO)

Gasoline Range Organics (GRO)

EPA METHOD 8021B: VOLATILES

Surr: 4-Bromofluorobenzene

EPA METHOD 300.0: ANIONS				0	yst: LGT
Analyses	Result	PQL	Qual Units	DF Date Analyzed	Batch
Lab ID: 1607083-004	Matrix:	SOIL	Received	Date: 7/2/2016 10:15:00 AM	[
Project: MD16 Hydro 5			Collection	Date: 7/1/2016 9:10:00 AM	
CLIENT: APEX TITAN			Client Samp	le ID: DP-4	

30

10

4.7

70-130

80-120

0.024

0.047

0.047

0.094

80-120

mg/Kg

mg/Kg

%Rec

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

ND

ND

88.1

ND

101

ND

ND

ND

ND

96.3

	Refer to the QC	Summary	report and	sample	login chee	cklist for	flagged	QC	data and	preservation	information.
_											

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

WO#: 1607083

Page 5 of 8

13-Jul-16

Hall Environmental Analysis Laboratory, Inc.

Client: APEX TITAN **Project:**

MD16 Hydro 5

Sample ID MB-26315	SampType: MBLK	TestCode: EPA Method			
Client ID: PBS	Batch ID: 26315	RunNo: 35578			
Prep Date: 7/8/2016	Analysis Date: 7/11/2016	SeqNo: 1101772	Units: mg/Kg		
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit	Qual
Chloride	ND 1.5				
Sample ID LCS-26315	ND 1.5 SampType: LCS	TestCode: EPA Method	300.0: Anions		
		TestCode: EPA Method RunNo: 35578	300.0: Anions		
Sample ID LCS-26315	SampType: LCS		300.0: Anions Units: mg/Kg		
Sample ID LCS-26315 Client ID: LCSS	SampType: LCS Batch ID: 26315 Analysis Date: 7/11/2016	RunNo: 35578		RPDLimit	Qual

Qualifiers:

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

Client: Project:

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APEX TITAN MD16 Hydro 5

Sample ID MB-26260	SampTy	pė: MB	BLK	TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: PBS	Batch	ID: 262	260	RunNo: 35477									
Prep Date: 7/6/2016	Analysis Da	te: 7/	7/2016	S	SeqNo: 1	098295	Units: mg/Kg						
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	SampTy	pe: LC	s	Test	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics				
Sample ID LCS-26260 Client ID: LCSS		pe: LC			tCode: El		8015M/D: Die	esel Range	e Organics				
		ID: 262	260	R		5477	8015M/D: Die Units: mg/K	·	Organics				
Client ID: LCSS	Batch	ID: 262	260 7/2016	R	unNo: 3	5477		·	e Organics	Qual			
Client ID: LCSS Prep Date: 7/6/2016	Batch Analysis Da	ID: 26 2 Ite: 7 /1	260 7/2016	R	RunNo: 3 GeqNo: 10	5477 098315	Units: mg/K	g		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 6 of 8

1607083

WO#:

13-Jul-16

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: APEX TITAN

Project: MD16 Hydro 5

Sample ID MB-26229	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch	ID: 26	229	R	RunNo: 35443							
Prep Date: 7/5/2016	Analysis Date: 7/6/2016			S	SeqNo: 1	097615	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	960		1000		95.5	80	120					
Sample ID LCS-26229	SampT	ype: LC	S	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS		10. 00		RunNo: 35443								
Client ID: LCSS	Batch	ID: 26	229	R	unNo: 3	5443						
Prep Date: 7/5/2016	Batch Analysis D				anno: 3 SeqNo: 1		Units: mg/K	g				
			6/2016				Units: mg/K HighLimit	g %RPD	RPDLimit	Qual		
Prep Date: 7/5/2016	Analysis D	ate: 7/	6/2016	s	SeqNo: 1	097616	•	•	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
- 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

WO#: 1607083

13-Jul-16

Page 7 of 8

Q	С	SUI	MN	IA	R	Y	F	RE	P	0	R	Т					
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WO#: 1607083

13-Jul-16

Hall Environmenta	l Analysis	Labora	tory, I	nc.
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Client: Project: APEX TITAN MD16 Hydro 5

Sample ID MB-26229	SampT	ype: ME	BLK	Tes	tCode: E					
Client ID: PBS	Batch	D: 26	229	F	RunNo: 3					
Prep Date: 7/5/2016	Analysis D	ate: 7/	6/2016	S	SeqNo: 1	097633	Units: mg/M	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		92.8	80	120			
Sample ID LCS-26229	SampT	ype: LC	S	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch	n ID: 26	229	F	RunNo: 3					
Prep Date: 7/5/2016	Analysis D	ate: 7/	6/2016	S	eqNo: 1	097635	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	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
 - value above qualititation 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
Client Name: APEX AZTEC Work Order Number: 1607083 Received by/date: 4 07/02/6 Logged By: Joe Archuleta 7/2/2018 10:15:00 AM Completed By: Joe Archuleta 7/5/2016 5:5:58 AM Reviewed By: 4 7/6 2/16 1 Custody seals intact on sample bottles? Yes 2 2. Is Chain of Custody Yes 7 2 3. How was the sample delivered? Courier Log In 4 Was an attempt made to cool the samples? Yes 7 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 7 6. Sample(s) in proper container(s)? Yes 7 7. Sufficient sample volume for indicated test(s)? Yes 7 8. Are samples (except VOA and ONG) properly preserved? Yes 7 9. Was preservative added to bottles? Yes 7 10. VOA vials have zero headspace? Yes 1 11. Were any sample containers received broken? Yes 1 12.	uboratory wkins NE M 87109 Sample Log-In Check List 845-4107 ental.com
Logged By: Joe Archuleta 7/2/2018 10:15:00 AM Completed By: Joe Archuleta 7/5/2018 6:51:58 AM Reviewed By: Archuleta 7/5/2018 6:51:58 AM Chain of Custody Tip 5/16 Chain of Custody complete? Yes 1. Custody seals intact on sample bottles? Yes 2. Is Chain of Custody complete? Yes 3. How was the sample delivered? Courier Log In 4. Was an attempt made to cool the samples? Yes 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 6. Sample(s) in proper container(s)? Yes Yes 7. Sufficient sample volume for indicated test(a)? Yes Yes 8. Are samples (except VOA and ONG) properly preserved? Yes Yes 9. Was preservative added to bottles? Yes Yes 10. VOA vials have zero headspace? Yes Yes 11. Were any sample containers received broken? Yes Yes 12. Doee paperwork match bottle labels? Yes Yes 13. Are matrices correctly identified on Chain of Custody? Yes Yes 14. Is it clear what analyses were requested? Yes Yes	RcptNo: 1
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Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec,

ico 87410 · Office: 505-334-5200 · Fax: 505-334-5204



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

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

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

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

Sincerely,

Ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

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 1607307-001 Lab ID: Matrix: SOIL Received Date: 7/6/2016 7:35:00 AM . ** ** . DOI 0

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 RANG	E 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 RANG	θE				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.

Q	uali	fier	'S:	

*

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

Value exceeds Maximum Contaminant Level.

- ND Not Detected at the Reporting Limit
- 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 Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 8 J
- Р Sample pH Not In Range
- RL **Reporting Detection Limit**
- W Sample container temperature is out of limit as specified

Date Reported: 7/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITANClient Sample ID: XP-2Project:Trunk MD 16" HydroCollection Date: 7/5/2016 2:40:00 PMLab ID:1607307-002Matrix: SOILReceived 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 4:04:45 PM	26328
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	;			Analyst	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 RANG	GE				Analyst	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					Analyst	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.

Q	ua	li	fie	rs	:

8

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

Date Reported: 7/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITANClient Sample ID: XP-3Project: Trunk MD 16" HydroCollection Date: 7/5/2016 2:50:00 PMLab ID: 1607307-003Matrix: SOILReceived 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 4:17:10 PM	26328
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	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	θE				Analyst	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					Analyst	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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	н	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit

- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 8
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1607307

Date Reported: 7/18/2016

Hall Environmental Analysis Laboratory, Inc.

Analyses		Result	PQL	Qual	Units	DF Date Analyzed	Batch		
Lab ID:	1607307-004	Matrix:	SOIL		Received	Date: 7/6/2016 7:35:00 AM			
Project:	Trunk MD 16" Hydro			(Collection	Date: 7/5/2016 3:00:00 PM			
CLIENT:	APEX TITAN	Client Sample ID: XP-4							

Analyses	Result	Result PQL Qual Units			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	1			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 RAN	NGE				Analys	: 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	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

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

QC SUMMARY REPORT

WO#: 1607307

Ha	nvii	onmo	ental	Analy	/SIS	Labo	rator	у,	Inc.

Client: Project:

APEX TITAN 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	SeqNo: 1101743	Units: mg/Kg			
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual		
Chloride	ND 1.5					
Sample ID LCS-26328	SampType: LCS	TestCode: EPA Method	300.0: Anions			
Sample ID LCS-26328 Client ID: LCSS	SampType: LCS Batch ID: 26328	TestCode: EPA Method RunNo: 35578	300.0: Anions			
	1 31		300.0: Anions Units: mg/Kg			
Client ID: LCSS	Batch ID: 26328 Analysis Date: 7/11/2016	RunNo: 35578		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

18-Jul-16

Page 5 of 8

WO#: 1607307

Page 6 of 8

18-Jul-16

Client: APEX TITAN Project: Trunk MD 16" Hydro

1

1

Project:	Trunk MI	O 16" Hydr	0								
Sample ID	LCS-26309	SampTy	pe: LC	S	Test	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: 26	309	R	unNo: 3	5548				
Prep Date:	7/8/2016	Analysis Da	ite: 7/	11/2016	S	eqNo: 1	100969	Units: mg/M	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel 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	SampTy	pe: ME	BLK	Test	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	PBS	Batch ID: 26309 Analysis Date: 7/11/2016			RunNo: 35548						
Prep Date:	7/8/2016	Analysis Da	ite: 7/	11/2016	S	SeqNo: 1	100970	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		8.5		10.00		84.8	70	130			
Sample ID	1607307-001AMS	SampTy	pe: MS	3	Test	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	XP-1	Batch	ID: 26	309	R	RunNo: 3	5548				
Prep Date:	7/8/2016	Analysis Da	ite: 7/	11/2016	S	eqNo: 1	101096	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel 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	1607307-001AMSE	SampTy	pe: MS	SD	Test	Code: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	XP-1	Batch	ID: 26	309	R	unNo: 3	5548				
	7/9/2046	Analysis Da	te: 7/	11/2016	S	eqNo: 1	101097	Units: mg/k	(g		
Prep Date:	110/2010	/ analysis De									
Prep Date: Analyte	710/2010	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte	Drganics (DRO)		PQL 9.5	SPK value 47.26	SPK Ref Val 0	%REC 247	LowLimit 33.9	HighLimit 141	%RPD 12.0	RPDLimit 20	Qual S

Qualifiers:

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

QC SUMMARY REPORT

WO#: 1607307

18-Jul-16

Hall Environmental Analysis Laboratory, Inc.

APEX TITAN **Client: Project:** Trunk MD 16" Hydro

Sample ID MB-26286	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch	ID: 26	286	R	RunNo: 3	5527				
Prep Date: 7/7/2016	Analysis D	ate: 7/	8/2016	S	SeqNo: 1	100342	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	80	120			
Sample ID LCS-26286	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Sample ID LCS-26286 Client ID: LCSS		ype: LC			tCode: El		8015D: Gaso	line Rang	0	
		ID: 26	286	R		5527	8015D: Gaso Units: mg/K	Ū	0	
Client ID: LCSS	Batch	ID: 26	286 8/2016	R	RunNo: 3	5527		Ū	e RPDLimit	Qual
Client ID: LCSS Prep Date: 7/7/2016	Batch Analysis D	ID: 26 ate: 7/	286 8/2016	F	RunNo: 3 SeqNo: 1	5527 100343	Units: mg/K	g		Qual

Qualifiers:

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

Page 7 of 8

Sample pH Not In Range

Client: Project: APEX TITAN Trunk MD 16" Hydro

Sample ID MB-26286	SampT	ype: ME	BLK	Test	Code: E	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	ID: 262	286	R	unNo: 3	5527				
Prep Date: 7/7/2016	Analysis D	ate: 7/	8/2016	S	eqNo: 1	100371	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		98.9	80	120			
Sample ID LCS-26286	SampT	ype: LC	S	Test	Code: E	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	ID: 262	286	R	unNo: 3	5527				
Prep Date: 7/7/2016	Analysis D	ate: 7/			eqNo: 1		Units: mg/K	g		
Prep Date: 7/7/2016 Analyte	Analysis D Result	ate: 7/8 PQL	8/2016		eqNo: 1 %REC		Units: mg/K HighLimit	g %RPD	RPDLimit	Qual
			8/2016	S		100372	-	-	RPDLimit	Qual
Analyte	Result	PQL	8/2016 SPK value	S SPK Ref Val	%REC	100372 LowLimit	HighLimit	-	RPDLimit	Qual
Analyte Benzene	Result 0.99	PQL 0.025	8/2016 SPK value 1.000	S SPK Ref Val 0	%REC 98.6	100372 LowLimit 75.3	HighLimit 123	-	RPDLimit	Qual
Analyte Benzene Toluene	Result 0.99 0.96	PQL 0.025 0.050	8/2016 SPK value 1.000 1.000	SPK Ref Val 0 0	%REC 98.6 95.8	100372 LowLimit 75.3 80	HighLimit 123 124	-	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

WO#: 1607307

18-Jul-16

Page 8 of 8

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Albu TEL: 505-345-3975 I Website: www.hal	4901 querqui FAX: 5	Hawkins N! e. NM 87109 95-345-4109	se Sa	mp	ole Log-In C	Check List
Client Name: APEX AZTEC	Work Order Number	16073	07			RcptNo	1
Received by/date: 14T 015	loche						
Logged By: Lindsay Mangin 7/	6/2016 7:35:00 AM		C	Julyth	P		
	7/2016 1:15:37 PM		C	Juniy	P		
Reviewed By: A 09/0	7/16						
Chain of Custody							
1. Custody seals intact on sample bottles?		Yes		No		Not Present	
2. Is Chain of Custody complete?		Yes		No		Not Present	
3. How was the sample delivered?		Cour	ier				
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	V	No	1	NA	
6. Sample(s) in proper container(s)?		Yes		No			
7. Sufficient sample volume for indicated test(s)?		Yes		No	1		
8 Are samples (except VOA and ONG) properly p	reserved?	Yes	V	No			
9. Was preservative added to bottles?		Yes		No		NA	
10. VOA viais have zero headspace?		Yes		No [No VOA Vials 🗸	
11. Were any sample containers received broken?		Yes		No		# of preserved bottles checked	
12. Does paperwork match bottle labels?		Yes	\checkmark	No		for pH:	or >12 unless noted)
(Note discrepancies on chain of custody) 13. Are matrices correctly identified on Chain of Cu	stady?	Yes	~	No	-1	Adjusted?	or >12 unless noted)
14. Is it clear what analyses were requested?	stody	Yes		No			
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		No		Checked by:	
Special Handling (if applicable)							
16. Was client notified of all discrepancies with this	order?	Yes		No]	NA M	
Person Notified:	Date						
By Whom:	Via:	eMa	ail Pho	one 🗌 F	Fax	In Person	
Regarding:							
Client Instructions:							
17. Additional remarks:							
18. <u>Cooler Information</u> <u>Cooler No</u> Temp ^e C Condition Seal 1 1.0 Good Yes	Intact Seal No 5	Seal Da	ate S	igned By	y		

Offic Proje	ect Mani er's Nami nee D	onA	Sur	mm	Contact: Phone: PO/SO #: Sampler's Sign	A	Free	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Containe	ers		ANA Rec	UE	STEC	KOLORO	CHAIN OF CUSTODY RECO
Matrix	Date	Time	CoEo	Tr	Identifying Marks of Sample(s)		말들	NOA	Qui	al 250	ar ar	Q		/	1	//////	
			p	b		5 a	Шe	>	<-	~ -		•	/		1		Lab Sample ID (Lab Use Only)
5	TISIL	1430			XP-1						1	-+			*		1607307-001
S		1440			Xp-2						-			-	4		-002
S		1450			18.3						1	-			X		-003
5	*	1500			XP-4				-		1	-	×	×	×		
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Reling	uished by	(Signature) (Signature) (Signature) (Signature)		7	Date: Time: Receive [5]]16 [740] [5] Date: Time: Receive 5/16 [740] [540] Date: Time: Receive 5/16 [740] [50] Date: Time: Receive Date: Time: Receive	ed by:	(Signa) (Signa	iture)	ele ~	0	Date: 7/5/ Date: 7/02 Date: Date:	16		10 ne: 31 ne:		Bill to Tom	Long Eppors

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Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

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 <u>www.hallenvironmental.com</u> 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1607128 Date Reported: 8/20/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services Project: Trunk MD 16 Inch Lab ID: 1607128-001	Matrix:	AQUEOU	Co	llection l		2016 1	1:30:00 AM 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 M	ETALS						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. B
- 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
- J Analyte detected below quantitation limits Page 1 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

*

Analytical Report

Lab Order 1607128 Date Reported: 8/20/2016

Hall Environmental Analysis Laboratory, Inc.

Matrix: AQUEOUS

CLIENT: Enterprise Field Services

1607128-001

Trunk MD 16 Inch

Project:

Lab ID:

Client Sample ID: Rupture #6 Collection Date: 7/5/2016 11:30:00 AM

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

nalyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PA 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:

*

11

100

- Value exceeds Maximum Contaminant Level. B
- 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 2 of 10

Date Reported: 8/20/2016

Hall Environmental Analysis Laboratory, Inc.

-

CLIENT: Enterprise Field Services Project: Trunk MD 16 Inch	Client Sample ID: Rupture #6 Collection Date: 7/5/2016 11:30:00 AM Matrix: AQUEOUS Received Date: 7/6/2016 7:35:00 AM									
Lab ID: 1607128-001	Result	MDL	PQL	Qual	Units	2016 7: 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		

Qu	alifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank	
		D	Sample Diluted Due to Matrix	E	Value above quantitation range	
		Η	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	Page 3 of 10
		ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range	1 460 5 01 10
		R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
		S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

Enterprise Field Services

0.94

2.5

2.5

5.0

9.9

0.10

0.10

0.10

0.50

0.50

1.000

2.500

2.500

5.000

10.00

Project: Trunk M	D 16 Inch								
Sample ID MB	SampT	ype: ME	BLK	Tes	Code: El	PA Method	300.0: Anion:	s '	
Client ID: PBW	Batch	n ID: A3	5474	F	unNo: 3	5474			
Prep Date:	Analysis D	ate: 7/	6/2016	S	eqNo: 1	098104	Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit
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							
Sulfate	ND	0.50							
Sample ID LCS	SampT	ype: LC	s	Tes	Code: El	PA Method	300.0: Anions	5	
Client ID: LCSW	Batch	n ID: A3	5474	R	unNo: 3	5474			
Prep Date:	Analysis D	ate: 7/	6/2016	S	eqNo: 1	098105	Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit
Fluoride	0.51	0.10	0.5000	0	102	90	110		
Chloride	4.9	0.50	5.000	0	97.4	90	110		

0

0

0

0

0

93.9

99.4

101

99.0

99.3

90

90

90

90

90

110

110

110

110

110

Qualifiers:

Client:

Nitrogen, Nitrite (As N)

Nitrogen, Nitrate (As N)

Phosphorus, Orthophosphate (As P

Bromide

Sulfate

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

Page 4 of 10

20-Aug-16

WO#: 1607128

Qual

Qual

Client: Enterprise Field Services

Project: Trunk MD 16 Inch

1

Sample ID rb	SampT	ype: MI	BLK	Test	Code: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	1D: A3	5447	R	unNo: 3	5447				
Prep Date:	Analysis D	ate: 7	6/2016	S	eqNo: 1	097715	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
oluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
,2,4-Trimethylbenzene	ND	1.0								
,3,5-Trimethylbenzene	ND	1.0								
,2-Dichloroethane (EDC)	ND	1.0								
,2-Dibromoethane (EDB)	ND	1.0								
laphthalene	ND	2.0								
-Methylnaphthalene	ND	4.0								
-Methylnaphthalene	ND	4.0								
cetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
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								
-Chlorotoluene	ND	1.0								
-Chlorotoluene	ND	1.0								
is-1,2-DCE	ND	1.0								
is-1,3-Dichloropropene	ND	1.0								
,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
,2-Dichlorobenzene	ND	1.0								
,3-Dichlorobenzene	ND	1.0								
,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0							1	
,1-Dichloroethane	ND	1.0								
,1-Dichloroethene	ND	1.0								
,2-Dichloropropane	ND	1.0								
,3-Dichloropropane	ND	1.0								
,										

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

Page 5 of 10

WO#: 1607128

20-Aug-16

Client: Enterprise Field Services

Project: Trunk MD 16 Inch

Sample ID rb	SampT	ype: ME	BLK	Tes	TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch	n ID: A3	5447	F	RunNo: 3	5447					
Prep Date:	Analysis D	ate: 7/	6/2016	5	SeqNo: 1	097715	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
,1-Dichloropropene	ND	1.0									
lexachlorobutadiene	ND	1.0									
2-Hexanone	ND	10									
sopropylbenzene	ND	1.0									
I-Isopropyltoluene	ND	1.0									
I-Methyl-2-pentanone	0.50	10								J	
Nethylene Chloride	ND	3.0									
Butylbenzene	ND	3.0									
-Propylbenzene	ND	1.0									
ec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
ert-Butylbenzene	ND	1.0									
,1,1,2-Tetrachloroethane	ND	1.0									
,1,2,2-Tetrachloroethane	ND	2.0									
etrachloroethene (PCE)	ND	1.0									
rans-1,2-DCE	ND	1.0									
rans-1,3-Dichloropropene	ND	1.0									
,2,3-Trichlorobenzene	ND	1.0									
,2,4-Trichlorobenzene	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									
I,1,2-Trichloroethane	ND	1.0									
richloroethene (TCE)	ND	1.0									
richlorofluoromethane	ND	1.0									
,2,3-Trichloropropane	ND	2.0									
/inyl chloride	ND	1.0									
Kylenes, 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 Ics2	SampT	ype: LC	S	Tes	tCode: E	PA Method	8260B: VOL	ATILES			
Client ID: LCSW		ID: A3		F	RunNo: 3	5447					
Prep Date:	Analysis D	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				
oluene	20	1.0	20.00	0	101	70	130				
Chlorobenzene	20	1.0	20.00	0	97.6	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
- 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
 - Sample pH Not In Range
- RL Reporting Detection Limit

Р

W Sample container temperature is out of limit as specified

Page 6 of 10

WO#: 1607128

20-Aug-16

WO#: 1607128

20-Aug-16

Client: Enterprise Project: Trunk MI	e Field Ser D 16 Inch	vices								
Sample ID 100ng lcs2	SampT	ype: LC	S	Tes	tCode: El	PA Method	8260B: VOL	ATILES		,
Client ID: LCSW	Batch	ID: A3	5447	F	RunNo: 3	5447				
Prep Date:	Analysis D	ate: 7/	6/2016	5	SeqNo: 1	097716	Units: µg/L			
Analyte	Result	PQL		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			
	0 T			T						
Sample ID 1607128-001a ms	-	ype: MS					8260B: VOL	ATILES		
Client ID: Rupture #6		n ID: A3			RunNo: 3					
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 msc	d SampT	ype: MS	SD	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: Rupture #6	Batch	ID: A3	5447	F	RunNo: 3	5447				
Prep Date:	Analysis D	ate: 7/	7/2016	S	SeqNo: 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	
	2100		2000		105	70	130	0	0	
Surr: Dibromofluoromethane	2100		2000		105	10	100	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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 7 of 10

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1607128

Page 8 of 10

20-Aug-16

Client: Project:	Enterpris Trunk MI										
Sample ID	MB-26294	Sam	рТуре: М	BLK	Tes	tCode: È	PA Method	7470: Mercur	y .		
Client ID:	PBW	Bat	ch ID: 2	5294	F	RunNo: 3	35534				
Prep Date:	7/7/2016	Analysis	Date: 7	/8/2016	5	SeqNo: 1	100169	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.00013	0.00020	1							J
Sample ID	LCS-26294	Sam	oType: L	cs	Tes	tCode: E	PA Method	7470: Mercur	у		
Client ID:	LCSW	Bat	ch ID: 2	5294	F	RunNo: 3	5534				
Prep Date:	7/7/2016	Analysis	Date: 7	/8/2016	5	SeqNo: 1	100170	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0050	0.00020	0.005000	0	100	80	120			
Sample ID	1607128-001CMS	Sam	оТуре: М	S	Tes	tCode: E	PA Method	7470: Mercur	у		
Client ID:	Rupture #6	Bat	ch ID: 20	5294	F	RunNo: 3	5534				
Prep Date:	7/7/2016	Analysis	Date: 7	/8/2016	5	SeqNo: 1	100172	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0064	0.00020	0.005000	0.0001875	125	75	125			
Sample ID	1607128-001CMSI	Samp	оТуре: М	SD	Tes	tCode: E	PA Method	7470: Mercur	y		
Client ID:	Rupture #6	Bat	ch ID: 20	5294	F	RunNo: 3	5534				
Prep Date:	7/7/2016	Analysis	Date: 7	/8/2016	5	SeqNo: 1	100173	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0061	0.00020	0.005000	0.0001875	119	75	125	4.68	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

Q

QC SUMMARY REPORT	
Hall Environmental Analysis Laboratory, Inc.	

WO#: 1607128

20-Aug-16

Client: Project:	Enterprise Trunk MI										
Sample ID			Type: M					Total Recover	able Met	als	
Client ID:	PBW	Bate	ch ID: 26	285	F	RunNo:	35523				
Prep Date:	7/7/2016	Analysis	Date: 7	/8/2016	5	SeqNo:	1099961	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								
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 SampType: LCS				Tes	tCode: E	PA 6010B:	Total Recover	able Met	als	
Client ID:	LCSW	Bato	ch ID: 26	285	F						
Prep Date:	7/7/2016	Analysis	Date: 7	/8/2016	5	SeqNo: '	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			
um		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			
Lead		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		0	76.6	80	120			S
Sample ID	1607128-001CMS	Samp	Туре: М	s	Tes	tCode: E	PA 6010B:	Total Recover	able Meta	als	
Client ID:	Rupture #6	Bato	ch ID: 26	285	F	RunNo:	35523				
Prep Date:	7/7/2016	Analysis	Date: 7	/8/2016	5	SeqNo: *	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			
Coloium		90	1.0	50.00	44.00	91.5	75	125			
Jaicium				0 5000	0.004670	90.5	75	125			
Calcium Chromium		0.46	0.0060	0.5000	0.004070	00.0	10				

- * 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
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

Value above quantitation range E

J Analyte detected below quantitation limits Page 9 of 10

Р Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified W

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client: Enterprise Field Services

Project: Trunk MD 16 Inch

Sample ID 1607128-00	ICMS Samp	Type: MS	6	TestCode: EPA 6010B: Total Recoverable Metals						
Client ID: Rupture #6	Bat	ch ID: 26	285	RunNo: 35523						
Prep Date: 7/7/2016	Analysis	Date: 7/	8/2016	5	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			
Selenium	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	Sample ID 1607128-001CMSD SampType: MSD				Tes	tCode: E	PA 6010B:	Total Recover	able Meta	als	
Client ID:	Rupture #6	Bato	h ID: 26	285	R	unNo: 3	5523				
Prep Date:	7/7/2016	Analysis I	Date: 7/	8/2016	S	eqNo: 1	099984	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic		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	
1		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	
Selenium		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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 10 of 10

20-Aug-16

WO#: 1607128

HALL ENVIRONMENTAL ANALYSIS LABORATORY	TEL: 505-345-3975	4991 Howkins N querque, NM 8710		ble Log-In Check List
Client Name: Enterprise	Work Order Number	1607128		ReptNo 1
Received by/date	orland			
Logged By: Lindsay Mangin	7/6/2016 7:35:00 AM		J ymas	
Completed By: Lindsay Mangin	7/6/2018 8:53:18 AM		Jullipo	
Reviewed By:	01/06/16			
Chain of Custody	1.5			
1. Custody seals intact on sample bottles?		Yes	No	Not Present
2. Is Chain of Custody complete?		Yes 🗹	No	Not Present
3. How was the sample delivered?		Courier		
Log In				
 Was an attempt made to cool the samples' 	?	Yes 🗹	No	NA
5. Were all samples received at a temperature	e 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) prope	rly 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 brok	en?	Yes	No 🗹	# of preserved bottles checked
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🖌	No	for pH: (<2)pr >12 unless noted)
13. Are matrices correctly identified on Chain of	f Custody?	Yes 🗹	No	Adjusted? NO
14. Is it clear what analyses were requested?		Yes	No	Checked by: and
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No	
Special Handling (if applicable)		_		-
16. Was client notified of all discrepancies with	this order?	Yes	No	NA 🗹
Person Notified:	Date			
By Whom:	Via: [eMail Ph	one 🔄 Fax	In Person
Regarding: Client Instructions:				
17. Additional remarks:				
18 Cooler Information				
Cooler No Temp °C Condition S 1 1.0 Good Ye		Seal Date 5	Bigned By	
Page of				

In Time: Relipcitshed by	The Time Relinquished by.				-16 113 Later Kapture #6	ate Time Matrix Sample Request ID	EDD (Type)	NELAP Other	5	Condard D Loud A (Evil Validation)	iail or Fax#: Eylongeenad.com	one # SoS - Sm . 2284	112 1	illing Address: 6 14 Roi Ny Ave.		ent Entripose Pladuats	Chain-of-Custody Record
Time: Relipsed by Defe Tire//C	Muntuity holds Time				3 HORD MACH/HMS -001	Container Preservative HEAL No.	Sample Temperature: 120		Sampler: TSC	Thomas Long	Project Manager:		Project #:	Irunk 140 16 Inch		Standard Mr Rush	Turn-Around Time: 3 day
Any sub-o	Romarks: 1620 Linits				X	BTEX + M BTEX + M TPH 8015 TPH (Meth EDB (Meth PAH's (83 RCRA 8 M Anions (F, 8081 Pest 8260B (VC 8270 (Son Cotton Air Bubble	TBE B (G nod 4 nod 5 10 or letak CI,Ni icide DA) ni VC	+ Tf RO / 18.1 604.1 7 827 5 O ₃ ,N S / 8 O ₃ ,N S / 8	PH (DR DR)))))))) 70 SI ()) 70 SI ()) 70 SI ()) 70 SI ()) 70 SI ())	Gas o C / M MS) PO4,S PCB's	niy) RO)	Anal	U h	4901 Hawkins NE - Albuquerque, NM 87109	m	- A .	HALL ENVIRONMENTAL



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

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 <u>www.hallenvironmental.com</u> 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 7/25/2016

Hall Environmental Analysis Laboratory, Inc.

Analyses		Result	PQL	Qual Units	DF Date Analyzed	Batch
Lab ID:	1607412-001	Matrix:	SOIL	Receive	d Date: 7/9/2016 11:08:00 AM	
Project:	Trunk MD 16" Hydro			Collectio	n Date: 7/8/2016 3:15:00 PM	
CLIENT:	APEX TITAN			Client Sam	ple ID: HP-1	

EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	7/21/2016 9:57:57 AM	26529
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	6			Analyst	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 RANGE					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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 7
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Date Reported: 7/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITANClient Sample ID: HP-2Project: Trunk MD 16" HydroCollection Date: 7/8/2016 3:25:00 PMLab ID: 1607412-002Matrix: SOILReceived 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 RANGE	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 RANG	E				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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 7
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Date Reported: 7/25/2016

Hall Environmental Analysis Laboratory, Inc.

Analyses		Result	PQL	Qual	Units	DF Date Analyzed	Batch
Lab ID:	1607412-003	Matrix:	SOIL		Received	Date: 7/9/2016 11:08:00 AM	
Project:	Trunk MD 16" Hydro				Collection	Date: 7/8/2016 3:35:00 PM	
CLIENT:	APEX TITAN			C	lient Samp	le ID: HP-3	

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 RANGI	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 RANG	E				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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 7
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	w	Sample container temperature is out of limit as specified

WO#: 1607412

25-Jul-16

APEX TITAN **Client: Project:** Trunk MD 16" Hydro

Sample ID MB-26529	SampType: mblk	TestCode: EPA Method		
Client ID: PBS	Batch ID: 26529	RunNo: 35903		
Prep Date: 7/21/2016	Analysis Date: 7/21/2016	SeqNo: 1111501	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID LCS-26529	SampType: Ics	TestCode: EPA Method	300.0: Anions	
Sample ID LCS-26529 Client ID: LCSS		TestCode: EPA Method RunNo: 35903	300.0: Anions	
	SampType: Ics		300.0: Anions Units: mg/Kg	
Client ID: LCSS	SampType: Ics Batch ID: 26529 Analysis Date: 7/21/2016	RunNo: 35903		RPDLimit Qual

Qualifiers:

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

Page 4 of 7

WO#: 1607412

25-Jul-16

Client: APEX Project: Trunk N	TITAN MD 16" Hydro								
Sample ID LCS-26331	LCS-26331 SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 2	6331	R	RunNo: 3	5611				
Prep Date: 7/11/2016	Analysis Date: 7	/12/2016	S	eqNo: 1	102563	Units: mg/M	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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: M	BLK	Test	Code: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: PBS	Batch ID: 20	6331	R	unNo: 3	5611				
Prep Date: 7/11/2016	Analysis Date: 7	/12/2016	S	eqNo: 1	102564	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Range Organics (DRO)	ND 10								
Surr: DNOP	9.0	10.00		90.2	70	130			

Qualifiers:

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

Page 5 of 7

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1607412

25-Jul-16

Client: Project:	APEX TI Trunk MI	TAN D 16" Hyd	ro								
Sample ID	MB-26325 SampType: MBLK			Tes	TestCode: EPA Method 8015D: Gasoline Range						
Client ID:	PBS	Batch	ID: 26	325	R	RunNo: 3	5619				
Prep Date:	7/11/2016	Analysis D	ate: 7/	12/2016	S	SeqNo: 1	102390	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 950	5.0	1000		94.7	80	120			
Sample ID LCS-26325 SampType: LCS					Test	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: 26	325	R	anNo: 3	5619				
Prep Date:	7/11/2016	Analysis D	ate: 7/	12/2016	S	eqNo: 1	102391	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
0	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: MS	6	TestCode: EPA Method 8015D: Gasoline Range						
Client ID:	HP-2	Batch	ID: 26	325	R	unNo: 3	5619				
Prep Date:	7/11/2016	Analysis D	ate: 7/	12/2016	S	eqNo: 1	102394	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	e Organics (GRO)	Result 27	PQL 4.8	SPK value 23.83	SPK Ref Val 0	%REC 115	LowLimit 59.3	HighLimit 143	%RPD	RPDLimit	Qual
	e Organics (GRO)								%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO) 1607412-002AMSI	27 1100		23.83 953.3	0	115 111	59.3 80	143			Qual
Gasoline Rang Surr: BFB	1607412-002AMSE	27 1100 O SampT	4.8	23.83 953.3	0 Test	115 111	59.3 80 PA Method	143 120			Qual
Gasoline Rang Surr: BFB Sample ID Client ID:	1607412-002AMSE	27 1100 O SampT	4.8 ype: MS ID: 26	23.83 953.3 SD 325	0 Test R	115 111 Code: EF	59.3 80 PA Method 5619	143 120	line Rang		Qual
Gasoline Rang Surr: BFB Sample ID Client ID:	1607412-002AMSD HP-2	27 1100 O SampT Batch	4.8 ype: MS ID: 26	23.83 953.3 SD 325 12/2016	0 Test R	115 111 Code: EF RunNo: 38 SeqNo: 14	59.3 80 PA Method 5619	143 120 8015D: Gaso	line Rang		Qual
Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte	1607412-002AMSD HP-2	27 1100 D SampT Batch Analysis D	4.8 ype: MS ID: 26 ate: 7/	23.83 953.3 SD 325 12/2016	0 Test R S	115 111 Code: EF RunNo: 38 SeqNo: 14	59.3 80 PA Method 5619 102395	143 120 8015D: Gaso Units: mg/K	oline Rang Xg	e	

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

		_							WO#:	16074
Hall Environment	al Anal	ysis I	Laborat	ory, Inc.						25-Jul-1
Client: APEX 7	TITAN									
Project: Trunk N	1D 16" Hyd	iro								
Sample ID MB-26325	MB-26325 SampType: MBLK					PA Method	8021B: Vola	tiles		
Client ID: PBS	Batcl	h ID: 26	325	F	RunNo: 3	5619				
Prep Date: 7/11/2016	Analysis [Date: 7	12/2016	5	SeqNo: 1	102416	Units: mg/k	K g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene	ND	0.025								
oluene	ND	0.050								
thylbenzene	ND	0.050								
es, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		91.2	80	120			
Sample ID LCS-26325	Samp	Type: LC	s	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batc	h ID: 26	325	F	RunNo: 3	5619				
Prep Date: 7/11/2016	Analysis E	Date: 7/	12/2016	5	SeqNo: 1	102417	Units: mg/ł	۲g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene	0.97	0.025	1.000	0	96.6	75.3	123			
oluene	0.95	0.050	1.000	0	95.5	80	124			
thylbenzene	0.99	0.050	1.000	0	99.3	82.8	121			
vienes, Total	3.0	0.10	3.000	0	99.1	83.9	122			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.0	80	120			
Sample ID 1607412-001AMS	Samp1	Type: MS	6	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: HP-1	Batcl	h ID: 26	325	F	RunNo: 3	5619				
Prep Date: 7/11/2016	Analysis D	Date: 7/	12/2016	S	SeqNo: 1	102419	Units: mg/h	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene	0.98	0.023	0.9302	0	105	71.5	122			
oluene	1.0	0.047	0.9302	0	109	71.2	123			
thylbenzene	1.1	0.047	0.9302	0	115	75.2	130			
∋s, Total	3.2	0.093	2.791	0	115	72.4	131			
Surr: 4-Bromofluorobenzene	0.92		0.9302		98.8	80	120			
Sample ID 1607412-001AMS	BD SampT	Type: MS	SD	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: HP-1	Batch	h ID: 26	325	F	RunNo: 3	5619				
Prep Date: 7/11/2016	Analysis D	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
enzene	0.99	0.024	0.9690	0	102	71.5	122	1.52	20	
oluene	0.98	0.048	0.9690	0	101	71.2	123	3.72	20	
thylbenzene	1.0	0.048	0.9690	0	108	75.2	130	2.07	20	
es, Total	3.1	0.097	2.907	0	107	72.4	131	3.25	20	
Surr: 4-Bromofluorobenzene	0.95		0.9690		97.9	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- 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

Р

W Sample container temperature is out of limit as specified

Page 7 of 7

WO#: 1607412

ENVIRONMENTAL ANALYSIS LABORATORY TEL: 503	onmenia: Anaiysis Laboraio 4901 Hawkins N Albuquerque, NM 8710 345-3975 FAX: 505-345-410 : www.hallenvironmental.co	99 Sam	ple Log-In Check List
Client Name: APEX AZTEC Work Order	Number: 1607412		RoptNo: 1
Received by/date:	16		
Logged By: Lindsay Mangin 7/9/2016 11:00	3:00 AM	Julythego	
Completed By: Lindşay Mangin 7/9/2016 (12:50	0:37 PM	Autifligo	
Reviewed By: DTC	2110		
Chain of Custody	100		
1. Custody seals intact on sample bottles?	Yes	No	Not Present
2. Is Chain of Custody complete?	Yes 🖌	No []	Not Present
3. How was the sample delivered?	Courier		
Log In			
	Yes V	No	NA
4. Was an attempt made to cool the samples?	Tes (*)		here and
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 V	NA
10. VOA vials have zero headspace?	Yes	No	No VOA Viels 🗹
11. Were any sample containers received broken?	Yes	No 🗹	# of preserved bottles checked
12. Does paperwork match bottle labels?	Yes 🖌	No	for pH:
(Note discrepancies on chain of custody)	Mag I	No.	(<2 or >12 unless noted) Adjusted?
 Are matrices correctly identified on Chain of Custody? Is it clear what analyses were requested? 	Yes 🗹	No	
15. Were all holding times able to be met?	Yes 🗹	No 🗌	Checked by.
(If no, notify customer for authorization.)			
16. Was client notified of all discrepancies with this order?	Yes	No 🗌	NA 🗹
Person Notified:	Date		
By Whom:		one Fax	In Person
Regarding			
Client Instructions:			Contraction of the second representation
17. Additional remarks:			
18. Cooler Information			
Cooler No Temp *C Condition Seal Intact Sea	No Seal Date	Signed By	
1 3.3 Good Yes		1	
Page 1 of 1			

						CHAIN OF CUSTODY RECO
		.4			ANALYSIS	Lab use only Due Date:
	Laboratory: 14	11			REQUESTED	
APEX	Address: A	BA; N	ins			
Office Location		24/10			/	Temp. of coolers when received (C*)3
	Contact:	titra	nan			
	Phone:	1.1.1.24	ind f		1	Page of
Project Manager K.Summers	PO/SO #:				3	
Sampler's Name	Sampler's Signature	-			H H	s / / / / /
Ranee Deechilly E	Ripulal	L			H H	
Proj. No. Project Name			Type of Contain	ners	7 5	\$
Think M	016" Hydro				EUSI BIEN BUIS TON 60210	
	trks of Sample(s)	epth voa	AG 1.LL ml	ar ass	1 / 7 /	
			<- N-	37 -		Lab Sample ID (Lab Use Only)
57816 1515 X HP	-1				XXX	1607412-001
	-2			1	XXX	-02
S V 1535 X HI	-3			j	XXX	-073
	NES					
	1212					
Turn around time QAormal 25% Rush] 50% Rush ☐ 100% F	lush				
Relinguished by (Signature) Date:	Time: Decrived by:			Date: 7/8/16	Time: NOT	TES:
Relinguished by (Signature) Date:	Time: Received by:	1		7/8/16	Time:	Bill to Tom Long EPROD
M. Water 7/8/10 18	570 20	-	0	thali	1108	
Relinquished by (Signature) Date:	Time: Received by	Signature)		Date:	'Time:	
Relinquished by (Signature) Date:	Time: Received by:	(Signature)		Date:	Time:	
Matrix WW - Wastewater W - Water	S - Soil SD - Solid L	1 louid A	A Air Day	0.01	maal tube Of	sludae O - Oil
Matrix WW - Wastewater W - Water Container VOA - 40 ml vial A/G - Amber / C		- Liquid A 50 ml - Glass	A - Air Bag wide mouth		rcoal tube SL - s lastic or other	sludge O - Oil

Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204


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

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Lab Order 1607562

Date Reported: 7/28/2016

Hall Environmental Analysis Laboratory, Inc.

			a second s		And the second se	
CLIENT: APEX TITAN			Client Sample	e ID: CP	-1	
Project: Trunk MD 16" Hydro			Collection I	Date: 7/1	1/2016 12:30:00 PM	
Lab ID: 1607562-001	Matrix: S	SOIL	Received I	Date: 7/1	2/2016 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 RANG	GE ORGANICS				Analyst	том
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 RAN	GE				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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 11
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report Lab Order 1607562

Date Reported: 7/28/2016

Batch

Hall Environmental Analysis Laboratory, Inc. **CLIENT: APEX TITAN** Client Sample ID: CP-2 Collection Date: 7/11/2016 12:40:00 PM **Project:** Trunk MD 16" Hydro Lab ID: 1607562-002 Matrix: SOIL Received Date: 7/12/2016 7:50:00 AM Result **PQL** Qual Units **DF** Date Analyzed Analyses

	and the second se					
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	6			Analyst	том
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	Ξ				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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 11
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	w	Sample container temperature is out of limit as specified

Lab Order 1607562

Date Reported: 7/28/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT:	APEX TITAN			Client Sampl	e ID: CF	- -3	
Project:	Trunk MD 16" Hydro			Collection]	Date: 7/1	1/2016 12:50:00 PM	
Lab ID:	1607562-003	Matrix:	SOIL	Received	Date: 7/1	2/2016 7:50:00 AM	
Analyses		Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA MET	HOD 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
Phosphor	rus, 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 MET	HOD 6010B: SOIL METALS					Analyst	MED
Calcium		1400	25	mg/Kg	1	7/14/2016 10:46:30 AM	26385
Magnesiu	im	1300	25	mg/Kg	1	7/14/2016 10:46:30 AM	26385
Potassium	n	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 MET	HOD 8015M/D: DIESEL RAN	IGE ORGANICS	S			Analyst	TOM
Diesel Ra	inge Organics (DRO)	ND	9.7	mg/Kg	1	7/14/2016 4:41:51 PM	26377
Surr: D	NOP	95.5	70-130	%Rec	1	7/14/2016 4:41:51 PM	26377
EPA MET	HOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline	Range Organics (GRO)	ND	4.7	mg/Kg	1	7/15/2016 7:47:53 PM	26374
Surr: B	FB	96.4	80-120	%Rec	1	7/15/2016 7:47:53 PM	26374
	HOD 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
Ethylbenz	zene	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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Η	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 11
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report Lab Order 1607562

Date Reported: 7/28/2016

Ratch

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

 Lab ID: 1607562-004
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

 Analyses
 Result
 PQL Qual Units
 DF Date Analyzed

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 RANG	E ORGANICS				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 RANG	GE				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

Qualifiers:		Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Η	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 11
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Lab Order 1607562

Date Reported: 7/28/2016

D-4-L

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: APEX TITAN
 Client Sample ID: CP-5

 Project:
 Trunk MD 16" Hydro
 Collection Date: 7/11/2016 1:10:00 PM

 Lab ID:
 1607562-005
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

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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 RAM	IGE ORGANICS	;			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 RA	NGE				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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 5 of 11
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMA Hall Environn				ory, Inc.					WO#
	PEX TITAN unk MD 16" Hydr	0							
Sample ID MB-26445	SampTy	/pe: ME	BLK	Test	Code: E	PA Method	300.0: Anior	IS	3
Client ID: PBS	Batch	ID: 26	445	R	unNo: 3	5763			
Prep Date: 7/15/2016	Analysis Da	ate: 7/	15/2016	S	eqNo: 1	106514	Units: mg/k	٢g	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit
Fluoride	ND	0.30							
Chloride	ND	1.5							
Nitrogen, Nitrite (As N)	ND	0.30							

Project:	Trunk MD 16" Hydro	

0.30

0.30

DEL DU DEDODE

ND

ND

Phosphorus, Orthophosphate (As P Sulfate	ND ND	1.5 1.5								
Sample ID LCS-26445	SampT	ype: LC	s	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: LCSS	Batch	Batch ID: 26445 RunNo: 35763								
Prep Date: 7/15/2016	/2016 Analysis Date: 7/15/2016 SeqNo: 1106515 Units: mg						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	SampType: MS TestCode: EPA Method 300.0: Anions								
Client ID: CP-1	Batch	ID: 26	445	F	RunNo: 3	5763				
Prep Date: 7/15/2016	Analysis D	ate: 7/	15/2016	5	SeqNo: 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			
	47	1.5	30.00	10.76	100	25.1	100			

Sample ID	1607562-001AMSD	SampTy	pe: MS	D	Test	Code: El	PA Method	300.0: Anion:	5		
Client ID:	CP-1	Batch	D: 26	445	R	unNo: 3	5763				
Prep Date:	7/15/2016	Analysis Da	te: 7/	15/2016	S	eqNo: 1	106534	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	56.0	15	110	4.62	20	

Qualifiers:

Bromide

Nitrogen, Nitrate (As N)

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 6 of 11

- Sample pH Not In Range
- RL **Reporting Detection Limit**

Р

W Sample container temperature is out of limit as specified VO#: 1607562

Qual

-

28-Jul-16

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client:

-

APEX TITAN

Trunk MD 16" Hydro **Project:**

Sample ID 1607562-001AMSD	Sample ID 1607562-001AMSD SampType: MSD						300.0: Anion	S		,
Client ID: CP-1	R	unNo: 3	5763							
Prep Date: 7/15/2016	15/2016	S								
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
- Analyte detected in the associated Method Blank В
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 7 of 11

28-Jul-16

WO#: 1607562

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1607562

28-Jul-16

	TITAN MD 16" Hydro								
Sample ID LCS-26377	SampType: LC	s	Test	Code: El	PA Method	8015M/D: Die	esel'Rang	e Organics	
Client ID: LCSS	Batch ID: 26	377	R	unNo: 3	5683				
Prep Date: 7/13/2016	Analysis Date: 7	14/2016	S	eqNo: 1	105643	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Range Organics (DRO)	51 10	50.00	0	101	62.6	124			
Surr: DNOP	4.7	5.000		94.1	70	130			
Sample ID MB-26377	SampType: M	BLK	Test	Code: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID: 26	377	R	unNo: 3	5683				
Prep Date: 7/13/2016	Analysis Date: 7	14/2016	S	eqNo: 1	105644	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Range Organics (DRO)	ND 10								
Surr: DNOP	9.1	10.00		91.1	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 8 of 11

WO#: 1607562

28-Jul-16

Hall Environmenta	l Analysis	Laboratory,	Inc.
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Client: Project:	APEX TI Trunk MI	TAN D 16" Hydi	ro								
Sample ID	MB-26374	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8015D: Gase	line Rang	e	
Client ID:	PBS	Batch	ID: 26	374	F	RunNo: 3	5744				
Prep Date:	7/13/2016	Analysis D	ate: 7/	15/2016	S	SeqNo: 1	105954	Units: mg/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		970		1000		96.9	80	120			
Sample ID	LCS-26374	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: 26	374	F	RunNo: 3	5744				
Prep Date:	7/13/2016	Analysis Da	ate: 7/	15/2016	S	SeqNo: 1	105955	Units: mg/h	(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	104	80	120			
Surr: BFB		1100		1000		108	80	120			
Sample ID	1607562-001AMS	SampT	pe: MS	8	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	CP-1	Batch	ID: 26	374	F	RunNo: 3	5744				
Prep Date:	7/13/2016	Analysis Da	ate: 7/	15/2016	S	SeqNo: 1	105970	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	24	4.7	23.34	0	104	59.3	143			
Surr: BFB		1000		933.7		110	80	120			
Sample ID	1607562-001AMS	SampT	ype: MS	SD	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	CP-1	Batch	ID: 26	374	F	RunNo: 3	5744				
Prep Date:	7/13/2016	Analysis Da	ate: 7/	15/2016	S	SeqNo: 1	105971	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	25	5.0	25.00	0	100	59.3	143	3.07	20	
Surr: BFB		1100		1000		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
- Analyte detected in the associated Method Blank B
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 9 of 11

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

QC SUMMARY REPORT	
Hall Environmental Analysis Laboratory, Inc	

APEX TITAN

Client:

Cheffet. In LA									
Project: Trunk M	MD 16" Hydro		- 4310- 1/						
Sample ID MB-26374	SampType	MBLK	Tes	tCode: El					
Client ID: PBS	Batch ID:	26374	F	RunNo: 35744					
Prep Date: 7/13/2016	Analysis Date:	7/15/2016	5	SeqNo: 1	105992	Units: mg/K	g		
Analyte	Result PO	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND 0.0	025							
Toluene	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:	LCS	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch ID:	26374	F	RunNo: 3	5744				
Prep Date: 7/13/2016	Analysis Date:	7/15/2016	S	SeqNo: 1	105993	Units: mg/K	g		
Analyte	Result PC	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99 0.0	1.000	0	99.0	75.3	123			
Toluene	0.97 0.0	1.000	0	97.1	80	124			
Ethylbenzene	0.99 0.0	1.000	0	99.4	82.8	121			
Xylenes, Total	3.0 0	.10 3.000	0	98.5	83.9	122			
Surr: 4-Bromofluorobenzene	0.98	1.000		97.9	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

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

range

WO#: 1607562

28-Jul-16

ts Page 10 of 11

QC SI	U MMARY	REP	ORT							WO#:	1607562
Hall E	nvironment	al Anal	ysis I	aborat	ory, Inc.						28-Jul-16
Client: Project:	APEX T Trunk M	ITAN D 16" Hyd	iro								
Sample ID	MB-26385	Samp	Type: ME	BLK	Tes	tCode: E	PA Method	6010B: Soil	Metals		
Client ID:	PBS	Batc	h ID: 26	385	F	RunNo: 3	5691				
Prep Date:	7/13/2016	Analysis [Date: 7/	14/2016	5	SeqNo: 1	104223	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium		ND	25								
Magnesium		ND	25								
Potassium		ND	50								
Sodium		ND	25								
Sample ID	LCS-26385	Samp	Type: LC	s	Tes	tCode: El	PA Method	6010B: Soil	Metals		
Client ID:	LCSS	Batc	h ID: 26	385	F	RunNo: 3	5691				
Prep Date:	7/13/2016	Analysis [Date: 7/	14/2016	S	SeqNo: 1	104224	Units: mg/k	٢g		
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	Samp	Гуре: МS	3	Tes	tCode: El	PA Method	6010B: Soil	Metals		
Client ID:	CP-1	Batc	h ID: 26	385	F	RunNo: 3	5691				
Prep Date:	7/13/2016	Analysis [Date: 7/	14/2016	S	SeqNo: 1	104238	Units: mg/k	٢g		
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	1607562-001AMS	D Samp	Гуре: МS	SD	Tes	tCode: El	PA Method	6010B: Soil	Metals		
Client ID:	CP-1	Batc	h ID: 26	385	F	RunNo: 3	5691				
Pren Date:	7/13/2016	Analysis [ate 7/	14/2016	c	SeaNo: 1	104239	I Inits: ma/k	(a		

Prep Date: 7/13/2016	Analysis D	ate: 7/	14/2016	S	SeqNo: 1104239 Units: mg/Kg					
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
- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- S % 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
- Page 11 of 11

- Sample pH Not In Range
- Reporting Detection Limit RL

Р

W Sample container temperature is out of limit as specified 1607562

ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-345-3975	Anatysis Laboratory 4901 Hawkins M iquerque, NM 8710 FAX: 505–345–410 llenvironmental.com	Sam	ple Log-In Check List
Client Name: APEX AZTEC Work Order Number:	1607562		ReptNo: 1
Received by/date: 07/12/1			
Logged By: Lindsay Mangin 7/12/2016 7:50:00 AM	C	Jungo	
Completed By: Lindsay Mangin 7/13/2016 8:36:24 AM	6	Julip	
Reviewed By: 07/13/16			
Chain of Custody			
1. Custody seals intact on sample bottles?	Yes	No 🗋	Not Present
2. Is Chain of Custody complete?	Yes 🗹	No 🗌	Not Present
3, How was the sample delivered?	Courier		
Log In			
4. Was an attempt made to cool the samples?	Yes 🗹	No 🗌	NA 🗔
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes M	No 🗌	
6. Sample(s) in proper container(s)?	Yes 🗹	No 🗌	
7. Sufficient sample volume for indicated test(s)?	Yes 🖌	No 🗆	
8. Are samples (except VOA and ONG) 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? (Note discrepancies on chain of custody)	Yes 🗹	No 🗆	bottles checked for 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 🗹	No 🗆	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗆	Checked by:

Special Handling (If applicable)

16. Was client notified of all di	screpancies with this order?		Yes		No 🗆		NA 🗹
Person Notified: By Whom:		Date Via:	eMail	Phone	Fax	In Pers	on
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			

Page 1 of 1

Manag Name	n <u>Ar</u> ger <u>K</u> uchilly	Sun	Mare Name	Laboratory: Address: Contact: Phone: PO/SO #: Sampler's Sign	A	bug	ung	ulp	M	ta		AN/ Red		STE	Geology O		//				Lab use on Due Date:	olers red (C°):
Name Dee	echilly	Che	Magen): 1											/	ag	Anim	7	//	//	///	1 2 3 Page	3 4 5
- Dee	echilly	Che	Magen): 1	Sampler's Sign	ature				/		_		L.	1 a	7	/₹	/	/	/	/ /		
Date					L.	K	4	A	>				SU2LETEN	SOIS THE	Chiardas	Sunter		/ /	1	/ /		
Date			FUNK M	DIVII Hyd	rð		No/Ty	pe of C	ontain	ners		(A l		F.	7	/ /	/	/	/		
	Time		ldentifying M	arks of Sample(s)	Start	End	VOA	AG 1 LL.	250 ml	Glass	D/d		/ ,	/ /	/ /	//		/	/	/ L	ab Sample ID (Lab) Use Only)
11/16	1230		CP	-1						1		X	X	×	X					1(00756	2-00
1	1240		CP	-2						1		X	×	X	×							-00
	1250		CP	-3						1		X	X	X	X							-00
\mathbf{Y}	1300		СР	-4						1		X	X	X	X							-0
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	Signature)		Date: 741(116)(Time: Recen	red by:	(Signa	L						752		OTE		111	-0-	Tor	n Lon	0	
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ed by (S	Signature)		Date:	Time: Receiv	ved by:	(Signa	ture)		+	Date		Ti	me:	1								
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Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 28, 2016

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

OrderNo.: 1607561

Dear Kyle Summers:

RE: Trunk MD 16"

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

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

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	26413
Cadmium	ND	0.0020	mg/L		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	A35696
Toluene	ND	1,0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Ethylbenzene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
1,2-Dichloroethane (EDC)	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Naphthalene	ND	2.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
1-Methylnaphthalene	ND	4.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
2-Methylnaphthalene	ND	4.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Acetone	ND	10	µg/L	1	7/15/2016 12:12:00 AM	A35696
Bromobenzene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Bromodichloromethane	6.6	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Bromoform	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Bromomethane	ND	3.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
2-Butanone	ND	10	µg/L	1	7/15/2016 12:12:00 AM	A35696
Carbon disulfide	ND	10	µg/L	1	7/15/2016 12:12:00 AM	A35696
Carbon Tetrachloride	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Chlorobenzene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Chloroethane	ND	2.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Chloroform	47	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
Chloromethane	ND	3.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
2-Chlorotoluene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
4-Chlorotoluene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
cis-1,2-DCE	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A35696
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	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.

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 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

CLIENT: APEX TITAN			Client Samp	le ID: Ru	pture #8	
Project: Trunk MD 16"			Collection	Date: 7/9	0/2016 12:00:00 PM	
Lab ID: 1607561-001	Matrix:	AQUEOUS	Received	Date: 7/1	2/2016 7:50:00 AM	
Analyses	Result	PQL Q	ual 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	A3569
Dibromomethane	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
1,2-Dichlorobenzene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
1,3-Dichlorobenzene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
1,4-Dichlorobenzene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
Dichlorodifluoromethane	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
1,1-Dichloroethane	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
1,1-Dichloroethene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
1,2-Dichloropropane	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
1,3-Dichloropropane	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
2,2-Dichloropropane	ND	2.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
1,1-Dichloropropene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
Hexachlorobutadiene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
2-Hexanone	ND	10	µg/L	1	7/15/2016 12:12:00 AM	A3569
Isopropylbenzene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
4-Isopropyltoluene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
4-Methyl-2-pentanone	ND	10	µg/L	1	7/15/2016 12:12:00 AM	A3569
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	A3569
n-Propylbenzene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
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	A3569
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
1,1,1-Trichloroethane	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
1,1,2-Trichloroethane	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
Trichloroethene (TCE)	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
Trichlorofluoromethane	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
1,2,3-Trichloropropane	ND	2.0	µg/L	1	7/15/2016 12:12:00 AM	
Vinyl chloride	ND	1.0	µg/L	1	7/15/2016 12:12:00 AM	A3569
Xylenes, Total	ND	1.5	µg/L	1	7/15/2016 12:12:00 AM	A3569
IS: 1,4-Dichlorobenzene-d4	10	0		1	7/15/2016 12:12:00 AM	
IS: Chlorobenzene-d5	10	0		1	7/15/2016 12:12:00 AM	

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 7
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

1

Lab Order 1607561

Date Reported: 7/28/2016

CLIENT: APEX TITAN Project: Trunk MD 16"		(Client Sampl		pture #8 0/2016 12:00:00 PM	
Lab ID: 1607561-001	Matrix:	AQUEOUS	Received	Date: 7/1	2/2016 7:50:00 AM	
Analyses	Result	PQL Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	DJF
IS: Pentafluorobenzene	10	0		1	7/15/2016 12:12:00 AM	A35696
Surr: 1,2-Dichloroethane-d4	96.8	70-130	%Rec	1	7/15/2016 12:12:00 AM	A35696
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	7/15/2016 12:12:00 AM	A35696
Surr: Dibromofluoromethane	99.9	70-130	%Rec	1	7/15/2016 12:12:00 AM	A35696
Surr: Toluene-d8	99.1	70-130	%Rec	1	7/15/2016 12:12:00 AM	A35696

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 7
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Al Project: Tr

APEX TITAN Trunk MD 16"

Sample ID 100ng Ics2	SampTy	pe: LC	s	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batch	ID: A3	5696	F	RunNo: 3	5696				
Prep Date:	Analysis Da	ate: 7/	14/2016	s	SeqNo: 1	105190	Units: µg/L			
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	SampTy	pe: ME	LK	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW		ID: A3		R	RunNo: 3	5696				
Prep Date:	Analysis Da	ate: 7/	14/2016	s	SeqNo: 1	105199	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								
State Southing	no	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 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 4 of 7

WO#: 1607561 28-Jul-16

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client:

Project:

APEX TITAN Trunk MD 16"

Sample ID rb	SampTy	pe: MBLK	Tes	tCode: EPA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	ID: A35696	F	RunNo: 35696				
Prep Date:	Analysis Da	te: 7/14/2016	\$	SeqNo: 1105199	Units: µg/L			
Analyte	Result	PQL SPK val	ue SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloroform	ND	1.0						
Chloromethane	ND	3.0						
2-Chlorotoluene	ND	1.0						
I-Chlorotoluene	ND	1.0						
xis-1,2-DCE	ND	1.0						
is-1,3-Dichloropropene	ND	1.0						
,2-Dibromo-3-chloropropane	ND	2.0						
Dibromochloromethane	ND	1.0						
Dibromomethane	ND	1.0						
,2-Dichlorobenzene	ND	1.0						
,3-Dichlorobenzene	ND	1.0						
,4-Dichlorobenzene	ND	1.0						
Dichlorodifluoromethane	ND	1.0						
,1-Dichloroethane	ND	1.0						
,1-Dichloroethene	ND	1.0						
,2-Dichloropropane	ND	1.0						
,3-Dichloropropane	ND	1.0						
2,2-Dichloropropane	ND	2.0						
,1-Dichloropropene	ND	1.0						
lexachlorobutadiene	ND	1.0						
2-Hexanone	ND	10						
sopropylbenzene	ND	1.0						
l-Isopropyltoluene	ND	1.0						
I-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						
ert-Butylbenzene	ND	1.0						
I,1,1,2-Tetrachloroethane	ND	1.0						
1,1,2,2-Tetrachloroethane	ND	2.0						
Fetrachloroethene (PCE)	ND	1.0						
1,2-DCE	ND	1.0						
1,3-Dichloropropene	ND	1.0						
,2,3-Trichlorobenzene	ND	1.0						
,2,4-Trichlorobenzene	ND	1.0						
,1,1-Trichloroethane	ND	1.0						
,1,2-Trichloroethane	ND	1.0						

Qualifiers:

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

WO#: 1607561 28-Jul-16

Page 5 of 7

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project: APEX TITAN Trunk MD 16"

Sample ID rb	SampT	ype: ME	BLK	Tes	Code: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	D: A3	5696	R	unNo: 3	5696				
Prep Date:	Analysis D	ate: 7/	14/2016	S	eqNo: 1	105199	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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								
IS: 1,4-Dichlorobenzene-d4	10	0								
IS: Chlorobenzene-d5	10	0								
IS: Pentafluorobenzene	10	0								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	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
- 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

WO#: 1607561

28-Jul-16

QC SUMMARY REPORT

Hall	Environmental	Analysis Laboratory.	Inc.

WO#: 1607561

28-Jul-16

Client: APEX TITAN Trunk MD 16" **Project:** Sample ID MB-26407 SampType: MBLK TestCode: EPA Method 7470: Mercury RunNo: 35726 Client ID: PBW Batch ID: 26407 SeqNo: 1105600 Prep Date: 7/14/2016 Analysis Date: 7/15/2016 Units: mg/L Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual ND 0.00020 ry Sample ID LCS-26407 SampType: LCS TestCode: EPA Method 7470: Mercury Client ID: LCSW Batch ID: 26407 RunNo: 35726 Prep Date: 7/14/2016 Analysis Date: 7/15/2016 SegNo: 1105601 Units: ma/L SPK value SPK Ref Val %REC %RPD HighLimit **RPDLimit** Analyte Result POL LowLimit Qual Mercury 0.0052 0.00020 0.005000 0 103 80 120 TestCode: EPA Method 7470: Mercury Sample ID 1607561-001BMS SampType: MS **Rupture #8** Batch ID: 26407 RunNo: 35726 Client ID: Prep Date: Analysis Date: 7/15/2016 SeqNo: 1105603 7/14/2016 Units: mg/L PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Analyte Result 0.0056 0.00020 0.005000 0.0001126 109 75 125 зигу Sample ID 1607561-001BMSD SampType: MSD TestCode: EPA Method 7470: Mercury Client ID: Rupture #8 Batch ID: 26407 RunNo: 35726 Prep Date: 7/14/2016 Analysis Date: 7/15/2016 SeqNo: 1105604 Units: mg/L PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result Qual 0.0056 0.00020 0.005000 0.0001126 110 75 0.599 125 20 ury

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 7

ANALYSIS LABORATORY	Albu TEL: 505-345-3975 Website: www.hal	4901 Hawkins guergue, NM 871 FAX: 505-345-41		Sample Log-In Check List							
Client Name: APEX AZTEC	Work Order Number:	1607561		RcptNo:	1						
Logged By: Lindsay Mangin 7/1	2/2016 7:50:00 AM		July Mgo								
Completed By: Lindsay Mangin 7/1 Reviewed By:	3/2016 8:33:26 AM		Jump								
Chain of Custody	1. 10										
1. Custody seals intact on sample bottles?		Yes	No 🗆	Not Present							
2. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present							
3. How was the sample delivered?		Courier									
Log In											
4. Was an attempt made to cool the samples?		Yes 🗹	No 🗌	NA 🗆							
5. Were all samples received at a temperature of	>0° C to 6.0°C	Yes 🗹	No 🗆								
6. Sample(s) in proper container(s)?		Yes 🗹	No 🗆								
7. Sufficient sample volume for indicated test(s)?		Yes 🗹	No 🗌								
8. Are samples (except VOA and ONG) properly p	reserved?	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 bottles checked							
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗆	for pH:	>12 unless noted)						
13. Are matrices correctly identified on Chain of Cus	stody?	Yes 🗹	No 🗌	Adjusted?	NO						
14. Is it clear what analyses were requested?	Yes 🗹	No 🗌		as							
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No	Checked by:							
Special Handling (If applicable)		_	_	_							
16. Was client notified of all discrepancies with this	order?	Yes	No 🗌	NA 🗹	1						
Person Notified:	Date		4. A								
By Whom:	Via: [eMail Pl	hone 📋 Fax	in Person							
Regarding: Client Instructions:											
17. Additional remarks:		,]						
18. Cooler Information											
Cooler No Temp °C Condition Seal I 1 1.0 Good Yes	Intact Seal No S	Seal Date	Signed By								
Page 1 of 1											

																		C	HAIN	OF C	USTODY RECO
	Azt	e C		Laboratory: Address: Contact: _/ Phone:	_		-	TP.	4.1	ma	201	100 - 100 - 100 - 10	ALYSI QUES								Lab use only Due Date: // O Temp. of coolers when received (C*): 1 2 3 4 1 Pageof
Project Manager				PO/SO #: _										11	/	/	/ /		/ /		
Sampler's Name	Suma		25	Samplerts Sign	ature							2		0	//	//	//	/ /	//		
Proj. No.	Proj	ect Na	me K M	0 16"	·		No/Ty	pe of C	Contai	ners		5	R		/		/ /	//			
Matrix Date T	Time C m P	Grab	Identifying Mar	ks of Sample(s)	Start	Depth	VOA	AG 1	SS IE	Glass	0/d	0	8		/	/ /		/		Lab Sa	mple ID (Lab Use Only)
W 7/8/16 12	200	X	Rupt	ure#8			3				1	X,	k						160	HTC	561-001
\rightarrow									-		_		+			-					
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Relinquished by (Sign Relinquished by (Sign	1	7	Date: /11/16 / (Ime: Receiv	ned by:	(Signa (Signa	ture	L		Date	-11	DT:	ne:			1	Vā	57	m 2 +89		
Relinquished by (Sigr	nature)	-	Date:	lime: Receiv	red by:	(Signa	ture)			Date	: 1	Tir	ne:								
	Vastewater IO ml vial		W - Water S NG - Amber / O	3 - Soil SD - So Glass 1 Liter	lid L	Liquio 250 ml -	diass v	- Air Ba vide mo	ag			coal tul astic or		SL - sl	ıdge	0	- Oil				

Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204