GW-211

2013 Background Sampling Report

Date: 6/24/2013



ENTERPRISE PRODUCTS PARTNERS L.P. ENTERPRISE PRODUCTS HOLDINGS LLC (General Partner) ENTERPRISE PRODUCTS OPERATING LLC

June 24, 2013

Return Receipt Requested 7012 3460 0001 7236 2343

Mr. Jim Griswold, Senior Hydrologist Environmental Bureau ENMRD/Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

District Copy For Scanning Only Has NOT been processed.

RCVD JUN 28'13 OIL CONS. DIV.

RE: Treatment Area Background Study -Largo Compressor Station Enterprise Field Services, LLC OCD GW Discharge Permit Number: GW-211 Rio Arriba County, New Mexico

DIST. 3

Dear Mr. Griswold,

Enterprise Field Services, LLC (Enterprise) is submitting the enclosed report entitled: Largo Compressor Station – Background Sampling, dated June 18, 2013 for above-referenced facility. This supplemental site investigation was performed to obtain additional soil and groundwater information at the proposed soil treatment area for remedial actions at the facility. Groundwater TDS values in this portion of the site are elevated (between 13,000 to 17,900 mg/L), and soils do not appear to have been affected by historical facility operations. Therefore, this area is suitable for use a soil treatment area, and existing soils in this area are suitable for use as backfill as proposed in the May 8, 2013 Corrective Action Work Plan (CAWP).

Remedial actions for soils containing petroleum hydrocarbons from historical facility operations will be performed in accordance with the CAWP. The CAWP describes the proposed excavation of affected soils from areas designated as Area 1 (the former condensate storage tank area), and Area 3 (retention pond area). These areas have been investigated previously as reported in the Interim Remedial Investigation Report dated May 15, 2010, the Proposed Facility-Wide Soil and Groundwater Investigation and Remedial Activities report dated June 10, 2010, the Environmental Site Investigation – Largo Compressor Station (GW-211) report dated March 24, 2011, the Supplemental Site Investigation & Quarterly Groundwater Monitoring Report (April 2012 Event), dated July 31, 2012, and the Supplemental Site Investigation Report (November 2012 and January 2013), dated February 22, 2013.

If you have any questions regarding the enclosed report, please contact me at (713) 381-2286 or drsmith@eprod.com.

Sincerely,

David R. Smith, P.G. Sr. Environmental Scientist

/dep

Rodney M. Sartor, REM Sr. Manager, Environmental

P. O. BOX 4324 HOUSTON, TX 77210-4324 713.381.6500 1100 LOUISIANA STREET HOUSTON, TX 77002-5227 www.enterpriseproducts.com Mr. Jim Griswold June 24, 2013 Page 2

Enclosure – Largo Compressor Station – Background Sampling

- cc: Brandon Powell, New Mexico Oil Conservation Division, 1000 Rio Brazos Road, Aztec, NM 87410 H. C. Berry, P.O. Box 579, Dexter, NM 88230
- ec: Chris Mitchell, Southwest Geoscience Kyle Summers, Southwest Geoscience

Southwest

606 S. Rio Grande Avenue Unit A, Downstairs West Aztec, New Mexico 87410 Ph: (505) 334-5200 Fax: (505) 334-5204

June 18, 2013

Enterprise Field Services, LLC P.O. Box 4324 Houston, Texas 77210-4324 Attn: Mr. David Smith

Re: Largo Compressor Station – Background Sampling OCD GW Discharge Permit Number: GW-211 Rio Arriba County, New Mexico SWG Project # 0410G002

Dear Mr. Smith:

Southwest Geoscience (SWG) appreciates the opportunity to submit this Background Sampling Summary Report for the above-referenced site (hereinafter, the "Site"). The Largo Compressor Station is located off of County Road (CR) 379 in Section 15, Township 26N, Range 7W in Rio Arriba County, New Mexico. The Site is a natural gas compressor station utilized to dehydrate and compress natural gas collected from production wells in the area for transportation via pipeline. The Site was constructed in the mid-1960s and currently includes two (2) compressor engines, a dehydration unit and related treater, one (1) bullet storage tank, a new condensate storage tank battery, which includes seven (7) new condensate storage tanks, inlet scrubbers, a control room, and an office/shop building.

In accordance with the *Corrective Action Work Plan (Area 1 and Area 3 - Soils)*, dated March 11, 2013, Enterprise Field Services, LLC (Enterprise) has performed sampling in the southeast portion of the Site to evaluate current background soil and groundwater conditions. These activities were performed in advance of the proposed acquisition of backfill material from the area, and in advance of the proposed use of the area for soil treatment.

The Site location is depicted on Figure 1 of Attachment A which was reproduced from a portion of the United States Geological Survey (USGS) 7.5-minute series topographic map. A Site vicinity map, created from an aerial photograph, is provided as Figure 2, and a Site map depicting the locations of soil borings and monitoring wells is provided as Figure 3.

Standard of Care and Limitations

The information contained in this letter represent SWG's professional opinions based upon information derived from on-Site activities and other services performed under this scope of work and were arrived at in accordance with currently acceptable professional standards. The findings were based upon analytical results provided by an independent laboratory. Evaluations of the geologic/hydrogeologic conditions at the Site for the purpose of this investigation are made from a limited number of available data points (i.e. soil borings and ground water samples) and site wide subsurface conditions may vary from these data points. SWG makes no warranties, express or implied, as to the services performed hereunder. Additionally, SWG does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties).

This report is based upon a specific scope of work requested by Enterprise. The agreement between SWG and Enterprise outlines the scope of work, and only those tasks specifically authorized by that agreement or outlined in this report were performed. This report has been

Environmental & Hydrogeologic Consultants

Enterprise Field Services, LLC • Largo CS Background Sampling SWG Project No. 0410G002 June 18, 2013



prepared for the intended 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 express written authorization of Enterprise and SWG.

Field Activities

During May of 2013, SWG advanced twelve (12) soil borings in the southeast portion of the Site utilizing a hollow stem auger. Seven (7) of the soil borings were advanced to a total depth of 6 feet below grade surface (bgs) to evaluate potential backfill material, and five (5) of the soil borings were completed as monitoring wells with total depths of up to 35 feet bgs to evaluate background groundwater quality. Samples were collected for laboratory analysis from each background soil boring/monitoring well boring at the following intervals:

- 2.5 feet bgs;
- 6 feet bgs, and;
- Estimated capillary fringe (monitoring well borings)

SWG did not observe hydrocarbon or other chemical impairment at any of the soil boring locations based on visual, olfactory, or photoionization detector (PID) evidence. PID readings, lithologic descriptions, and monitoring well completion details are provided in Attachment B.

Analytical Results

The soil and groundwater samples collected from each soil boring/monitoring well were analyzed for TPH GRO/DRO utilizing EPA method SW-846 #8015, BTEX utilizing EPA SW-846 #8021/8260, TPH utilizing EPA method 418.1 (soils only), chlorides utilizing EPA method 300.1 or equivalent, and total dissolved solids (TDS - groundwater only) utilizing SM 2540C. A summary of the analyses, sample type, and EPA-approved methods for background samples collected from the Site are presented in the following table:

Analysis	Sample Type	Number of Samples	Method
TPH GRO/DRO	Soil	29	SW-846 #8015
BTEX	Soil	29	SW-846 #8021/8260
TPH	Soil	29	EPA 418.1
Chloride	Soil	29	EPA 300.1 or equivalent
TPH GRO/DRO	Water	4	SW-846 #8015
BTEX	Water	4	SW-846 #8021/8260
Chloride	Water	4	EPA 300.1 or equivalent
TDS	Water	4	SM 2540C

SWG compared the analytical concentrations or laboratory reporting limits (RLs) associated with the background soil and groundwater samples to the Oil Conservation Division (OCD)

Enterprise Field Services, LLC • Largo CS Background Sampling SWG Project No. 0410G002 June 18, 2013

Southwest

Remediation Action Levels and/or the New Mexico Water Quality Control Commission (WQCC) *Groundwater Quality Standards.*

Analytical results for the background soil samples did not identify any concentrations of BTEX or TPH in excess of the Oil Conservation Division (OCD) *Remediation Action Levels*. Chloride concentrations ranged from below laboratory RLs to 630 mg/kg across the study area. The results of the background soil sample analyses are summarized in Table 1 of Attachment C.

Analytical results for the background groundwater samples did not identify any concentrations of BTEX or TPH above the WQCC *Groundwater Quality Standards*. Chloride concentrations ranged from below laboratory RLs to 140 mg/L. TDS analyses of the background groundwater samples indicate concentrations ranging from 13,000 mg/L to 17,900 mg/L. Monitoring well MW-79 was dry, and was not sampled. The results of the background groundwater sample analyses are summarized in Table 2 of Attachment C. Table 2 also includes prior TDS results from monitoring wells in other portions of the Site. Laboratory data reports and chain of custody documentation are provided in Attachment D.

Findings

Based on the analytical results and field observations, the shallow soil in the southeast portion of the Site appears suitable for use as backfill material in Area 1 and Area 3. The soils generally did not exhibit constituent of concern (COC) concentrations above the applicable regulatory standards/guidelines. Slightly elevated chloride concentrations were observed in soil samples at locations of likely natural accumulation, such as drainage areas and on top of a buried clay deposit. Use of these soils as backfill, as proposed in the *Corrective Action Work Plan (Area 1 and Area 3 - Soils)*, will not cause significant impacts to underlying groundwater, contribute to affected surface runoff, or affect future re-vegetation of the backfilled areas of the facility.

Background analytical results for groundwater indicate that the shallow groundwater bearing unit is not suitable for use as a source of drinking water due to elevated TDS concentrations. No other COCs were identified above WQCC *Groundwater Quality Standards* in this area of the Site.

If you should have any questions or comments regarding this letter report, please contact Kyle Summers or Chris Mitchell at (903) 821-5603 or (214) 762-3903, respectively.

Sincerely, Southwest Geoscience

Upunso Kyle Summers C.P.G.

Kyle Summers C.P.G. Manager, Four Corners

B. Chris Mitchell, P.G. Principal Geoscientist



ATTACHMENT A

Figures









ATTACHMENT B

Soil Boring/Monitoring Well Logs

NOTE:	This log is not to be used outside the original report.					S	out	hwest
	CLAYEY SAND, Moderate Yellowish Brown, Slightly Moist, No Odor					100%	0 0 0	
	SAND, Moderate Yellowish Brown, Wet, No Odor		+			100%	0 0 0 0	
	SANDY CLAY, Moderate Yellowish Brown, Wet @ 18 ft bgs, No Odor			17-18		100%	0 0 1 1 0	
	SILTY CLAY & CLAY, Moderate Yellowish Brown, Firm, Slightly Moist, No Odor					100%	0 0 0	
			, - - - -	56		80%	0	
	SILTY SAND, Moderate Yellowish Brown, Roots @ 2 ft bgs, Moist @ 3ft bgs, No Odor		0 	1.52.5		100%	0 0 0 0	
CONSTRUCTION	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY GROUNDWATER	DEPTH PID (ppm)	COMMENTS
oject Loo oject Ma ALLLIN te Starte te Comp illing Co iller: ring Me cologist: re Hole mpler T	cation: Rio Arriba County, NM inager: K. Summers IG & SAMPLING INFORMATION ed: 5/16/2013 pleted: 5/16/2013 ompany: Kyvek Kelly Padia thod: Hollow Stem Auger K. Summers <u>GROUNDWATER DEPTH</u> Diamter: 8"	Soil Boring Number: MW-76 Project Number: 0410G002 Drawn By: RDH Approved by: KS WELL CONSTRUCTION INFORMATION Well Diameter: 2" Screen Size: 0.010" Screen Length: 15' Casing Length: 12.5' Surface Completion: Above Group						

Sampler Type:	Hollow Stem Auger K. Summers 8" NA ST Depth at Completion ST Depth at Stabilization	Soil Boring Number: Project Number: Drawn By: Approved by: <u>WELL CONSTRUCTION</u> Well Diameter: Screen Size: Screen Length: Casing Length: Surface Completion:						MW-77 0410G002 RDH KS ON INFORMATION 2" 0.010" 15' 20' Above Ground			
MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS		
SANDY SILTY S No Odd SANDY SILT & 30.5 ft 1	AND, Moderate Yellowish Brown, Roots @ 2 ft bgs, Dry, r SILT, Moderate Yellowish Brown, Dry, No Odor CLAY, Moderate Yellowish Brown, Dry to Moist, Wet @ ogs, No Odor			3031		100% 0% 60% 60% 80% 100%		1 1 0 0 0 0 0 0 0 0 0 0 0 0 0	Cuttings only from 18 ft bgs to 30 ft bgs		

Client: Project: Project Loc Project Man Date Starte Date Starte Date Comp Drilling Co Driller: Boring Met Geologist: Bore Hole Sampler Ty	Largo Compressor Station ution: Rio Arriba County, NM ager: K. Summers 3 & SAMPLING INFORMATION 1: 5/16/2013 leted: 5/16/2013 leted: 5/16/2013 npany: Kyvek Kelly Padia hod: Hollow Stem Auger K. Summers GROUNDWATER DEPTH Diamter: 8" Depth at Completion pe: NA Depth at Stabilization			Soil Bo Project Drawn Appro Well D Screen Casin Surfac	AONI oring Nu t Numb b By: wed by: L CON Diameter a Size: a Length g Length ce Comp	TOR umber er: STRU : : : : : :	ING V	IG WELL/SOIL BORING LA SB-78 0410G002 RDH KS CTION INFORMATION NA NA NA NA NA				
MONITORING WELL CONSTRUCTION DETAIL		SOIL CLASSI	SIFICATION		DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL RECOVERY	GROUNDWATER	PID (ppm)	COMMENTS		
5-	SILTY SA	ND, Moderate Yellowish	Brown, No Odor, Dry		5-	1.52.5	100%		0 0 0 0			
NOTE: "	This log is	not to be used outside	the original report.				_5	So	U	thwest		

roject: roject Locati roject Manag RILLING ate Started: ate Complet rilling Com riller: oring Metho Geologist: ore Hole Di ampler Type	ect. Rio Arriba County, NM ect Manager: K. Summers ILLING & SAMPLING INFORMATION e Started: 5/20/2013 e Completed: 5/20/2013 ling Company: Kyvek ler: Kelly Padia ing Method: Hollow Stem Auger blogist: K. Summers <u>GROUNDWATER DEP</u> e Hole Diamter: 8"						STRU STRU		MW-79 0410G002 RDH KS CION INFORMATION 2" 0.010" 15' 20' Above Ground				
WELL CONSTRUCTION DETAIL		SOIL CLASSII	FICATION		STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY GROI INDWATER	DEPTH PID (ppm)	COMMENTS		
	SILTY SAND, M	loderate Yellowish	Brown, Dry to Moist, No C	dor			5-6		80% 60% 100%				
	SILTY SANDST Slightly Moist, N WEATHERED S Slightly Moist @	ONE, Light Gray t o Odor SILT & SANDSTC 28 ft bgs, No Odor	o Dusky Brown, Very Hard DNE, Moderate Yellowish B	, rown,			27-28		60% 60% 80%				
NOTE: TH	nis log is not to	be used outside 1	the original report.			30			100% 10		thuroct		

Client: Project: Project Loo Project Ma Date Starte Date Starte Date Comp Drilling Co Driller: Boring Me Geologist: Bore Hole Sampler T	Enterprise Field Servicesm LLC Largo Compressor Station ration: Rio Arriba County, NM nager: K. Summers G & SAMPLING INFORMATION d: 5/20/2013 oleted: 5/20/2013 mpany: Kyvek Kelly Padia chod: Hollow Stem Auger K. Summers GROUNDWATER DEPTH Diamter: 8" ✓ Depth at Completion ypeth at Stabilization	N Soil Bo Project Drawn Appro WELI Well D Screer Screer Casing Surfac	AONIT oring Nu t Numbe By: wed by: L CONS Diameter a Size: a Length g Length g Length	TOR mbers TRU STRU		WE ON 1	ILL/SC	DIL BORING LOG MW-80 0410G002 RDH KS CMATION 2" 0.010" 15' 20' Above Ground
MONITORING WELL DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	DEPTH PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry to Moist, No Odor CLAY & SILTY CLAY, Moderate Yellowish Brown to Moderate Brown, Moist, No Odor	NANANANANANANANANANANANANANANANANANANA		1.525		60% 100% 100% 100%		
	NO RECOVERY SAND, Moderate Yellowish Brown, Wet, No Odor	-2-2-	20 + + + 25 + + 25 + + + 30			100% 0%	- - - - - - - - - - - - - - - - - - -	
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WELL CONSTRUCTION DETAIL		SOIL CLASSI	SIFICATION		DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SAND, M	oderate Yellowish Brown	n, Moist, No Odor			1525		100%		0	
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Client: Project: Project Lo Project Ma	cation: inager:	Enterprise Field Serv Largo Compressor St Rio Arriba County, I K. Summers	icesm LLC ation NM	N Soil Bo	MONI'	TOR umber	ING	WE	LL/S	SOIL BORING LOG
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Driller: Boring Me Geologist: Bore Hole Sampler T	thod: Diamter: ype:	Kelly Padia Hollow Stem Auger K. Summers 8" NA	GROUNDWATER DEP ✓ Depth at Completion ✓ Depth at Stabilization	Well Diameter: Screen Size: H Screen Length: Casing Length: Surface Completion:						NA NA NA NA
WELL WELL CONSTRUCTION DETAIL		SOIL CLASSIFICATION SILTY SAND, Moderate Yellowish Brown, Moist, No Odor		STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY CROI INDWATER	DEPTH	COMMENTS
	SILTY SA	ND, Moderate Yellowish	a Brown, Moist, No Odor		0					0
-					+	1.52.5		100%	8	2
-	CLAY & S	SILTY CLAY, Moderate	Yellowish Brown, Dry, No Odor		+					0
				ななななななな	5	5-6		100%	,	0
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ient: oject:	Enterprise Field Servicesm LLC Largo Compressor Station	N	IONI	FOR	ING	WI	ELL/S	SOIL BORING LOG
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CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	(mud) COMMENTS
	SILTY SAND & SAND, Moderate Yellowish Brown, Gravel @ 3 ft bgs, Dry to Slightly Moist, No Odor		0	1.5-2.5		100%		0 0 0 0
	CLAY, Moderate Yellowish Brown to Modrate Brown, Dry, No Odor		5	5-6		100%	5	0 1 1
	SILT & SAND, Moderate Yellowish Brown, Slightly Moist, No Odor		10		-			0 0 0
	CLAY, Moderate Yellowish Brown to Moderate Brown, Slightly Moist, No Odor					100%		0
	SAND, Moderate Yellowish Brown, Moist, No Odor		15	15-16		8	×	0 0
	CLAY & CLAYEY SAND, Moderate Yellowish Brown, Wet, No Odor	1/	-			1009		0
H	CLAYEY SAND, Moderate Yellowish Brown, Wet, No Odor	1.1.1.						0

Project: Project Location: Project Manager: DRILLING & SAM Date Started: Date Completed: Drilling Company: Driller: Boring Method: Geologist: Bore Hole Diamter: Sampler Type:	Soil Bo Project Drawn Appro Well D Screer TH Screer Casing Surfac	E BORING LOG SB-84 0410G002 RDH KS KATION NA NA NA NA NA NA							
DETAIL	SOIL CLASSI	SSIFICATION		DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	GROUNDWATER	(mqq) UI9	COMMENTS
				-	1.52.5		0.00	0	
					56	10001	10078	1	

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Date Comp Drilling Co Driller: Boring Me Geologist: Bore Hole Sampler T	pleted: ompany: thod: Diamter: ype:	5/21/2013 Kyvek Kelly Padia Hollow Stem Auger K. Summers 8" NA	GROUNDWATER E	DEPTH tion tion	Well Diameter: Screen Size: Screen Length: Casing Length: Surface Completion:				<u>ION</u>	<u>DN INFORMATION</u> NA NA NA NA NA NA			
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	Odor						1.52.5		100%		1 1 1 1		
							5-6		100%		1		
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Client: Project: Project Lo Project Ma DRILLIN Date Starte Date Comp Drilling Co Driller:	cation: nager: G & SAMI ed: pleted: pmpany:	Enterprise Field Servi Largo Compressor Sta Rio Arriba County, N K. Summers PLING INFORMATIO 5/21/2013 5/21/2013 Kyvek Kelly Padia		MONITORING WELL/SOIL BORING L Soil Boring Number: SB-86 Project Number: 0410G002 Drawn By: RDH Approved by: KS WELL CONSTRUCTION INFORMATION Well Diameter: NA							
Boring Me Geologist: Bore Hole Sampler T	thod: Diamter: ype:	Hollow Stem Auger K. Summers 8" NA	GROUNDWATER D	EPTH tion tion	Screen Screen Casing Surfac	Size: Length Length Length e Comp	ı: 1: oletior	1:			NA NA NA
WELL WELL CONSTRUCTION DETAIL		SOIL CLASSI	FICATION		STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	GROUNDWATER	PID (ppm)	COMMENTS
	SILTY SA	ND, Moderate Yellowish	Brown, Dry to Slightly Mois	st, No		0 	1.52.5		100%	0 0 0 0	
NOTE:	This log is 1	not to be used outside	he original report.						S	out	hwest

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rilling Co Driller: Oring Me Geologist: Gore Hole ampler T	ompany: ethod: : Diamter: Type:	Kyvek Kelly Padia Hollow Stem Auger K. Summers 8" NA	GROUNDWATER DEPT	WEL Well I Screer H Screer Casin, Surfac	L CON Diameter n Size: n Lengtl g Lengtl ce Comj	STR r: n: h: pletior	<u>UCT</u>	ION	INI	FORM	NA NA NA NA NA NA
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	SILTY SA	ND, Moderate Yellowish	Brown, Dry to Moist, No Odor		0					o	
					-	1.52.5				0	
					-			100%		0	
	SILTY CL No Odor	AY & CLAY, Moderate V	Yellowish Brown, Dry to Moist,	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	-				1	0	
				-1-1-							
				いたくとうと	5	5-6		100%		0	



ATTACHMENT C

Tables



	Largo Compressor Station BACKGROUND SOIL ANALYTICAL SUMMARY										
Sample I.D.	Date	Sample Depth (feet)	Chloride (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	Total TPH by 418.1 mg/kg	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Entergy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation		500*	10	NE	NE	NE	50	100	10	0	
STATE DE MA	All makes	- Marianez	12-11-5-14	E	lackground S	oil Sampling May	2013			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	all the state
MW-76	5.16.13	2.5	<7.5	<0.047	<0.047	<0.047	<0.094	ND	<20	<4.7	<10
MW-76	5.16.13	6	<7.5	<0.048	<0.048	<0.048	<0.095	ND	<20	<4.8	<11
MW-76	5.16.13	18	<7.5	<0.048	<0.048	<0.048	<0.096	ND	<20	<4.8	<9.9
MW-77	5.16.13	2.5	170	<0.047	<0.047	<0.047	<0.094	ND	<20	<4.7	<9.9
MW-77	5.16.13	6	440	<0.046	<0.046	<0.046	<0.093	ND	<20	<4.6	<9.9
MW-77	5.16.13	31	45	<0.047	<0.047	<0.047	<0.093	ND	<20	<4.7	<10
SB-78	5.16.13	2.5	500	<0.047	<0.047	<0.047	< 0.094	ND	<20	<4.7	<9.9
SB-78	5.16.13	6	280	<0.049	< 0.049	<0.049	<0.096	ND	<20	<4.9	<10
MW-79	5.20.13	2.5	<7.5	<0.047	<0.047	<0.047	<0.094	ND	<20	<4.7	<10
MW-79	5.20.13	6	<7.5	<0.047	<0.047	<0.047	<0.094	ND	<20	<4.7	<10
MW-79	5.20.13	28	11	<0.047	<0.047	<0.047	<0.094	ND	<20	<4.7	<10
MW-80	5.20.13	2.5	280	<0.047	<0.047	<0.047	<0.095	ND	<20	<4.7	<10
MW-80	5.20.13	6	130	<0.046	<0.046	< 0.046	<0.092	ND	<20	<4.6	<10
MW-80	5.20.13	18	630	<0.047	<0.047	<0.047	<0.094	ND	<20	<4.7	<9.9
SB-81	5.20.13	2.5	<7.5	<0.047	<0.047	<0.047	<0.093	ND	<20	<4.7	<10
SB-81	5.20.13	6	83	<0.046	<0.046	<0.046	< 0.092	ND	<20	<4.6	<10
SB-82	5.20.13	2.5	<7.5	<0.046	<0.046	<0.046	<0.093	ND	<20	<4.6	<9.9
SB-82	5.20.13	6	410	<0.048	<0.048	<0.048	<0.096	ND	<20	<4.8	<10
MW-83	5.21.13	2.5	250	<0.046	<0.046	< 0.046	<0.092	ND	31	<4.6	<9.9
MW-83	5.21.13	6	89	<0.046	<0.046	<0.046	<0.092	ND	<20	<4.6	<10
MW-83	5.21.13	16	8.8	<0.049	<0.049	<0.049	<0.097	ND	<20	<4.9	<9.9
SB-84	5.21.13	2.5	<7.5	<0.046	<0.046	<0.046	<0.092	ND	<20	<4.6	<10
SB-84	5.21.13	6	11	<0.047	<0.047	<0.047	<0.095	ND	<20	<4.7	<10
SB-85	5.21.13	2.5	<7.5	<0.048	<0.048	<0.048	<0.096	ND	<20	<4.8	<9.9
SB-85	5.21.13	6	<7.5	<0.047	<0.047	<0.047	< 0.093	ND	<20	<4.7	<10
SB-86	5.21.13	2.5	<7.5	<0.046	<0.046	<0.046	<0.093	ND	<20	<4.6	<9.9
SB-86	5.21.13	6	<7.5	<0.047	< 0.047	<0.047	<0.093	ND	<20	<4.7	<10
SB-87	5.21.13	2.5	<7.5	<0.047	<0.047	<0.047	<0.094	ND	<20	<4.7	<10
SB.97	52113	6	370	<0.048	<0.048	<0.048	<0.097	ND	54	(4.8	<10

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

NA = Not Analyzed NE = Not Established

* = Small Landfarm: NMAC 19.15.36.16



TABLE 2Largo Compressor StationGROUNDWATER ANALYTICAL SUMMARY - BACKGROUND and TDS

Sample I.D.	Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	
New Mexico Water Quality Control Commission Groundwater Quality Standards		250*	10,000**	10	750	750	620	NE	NE	
	Prior TDS Sample Results from Apparently Unaffected Monitoring Wells									
MW-6	10.18.12	NA	8,420	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
MW-38	10.17.12	NA	3,000	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
MW-40R	10.16.12	NA	7,930	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
MW-41	10.16.12	NA	30,200	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0	
MW-42	3.3.11	NA	75,400	NA	NA	NA	NA	NA	NA	
MW-43	10.16.12	NA	7,630	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
MW-52	10.17.12	NA	27,000	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
		The second second	Backgro	ound Monitoring	g Wells		a fan de genere de			
MW-76	6.3.13	82	14,200	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
MW-77	6.3.13	140	17,900	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
MW-79	6.3.13	dry	dry	dry	dry	dry	dry	dry	dry	
MW-80	6.3.13	82	13,000	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
MW-83	6.3.13	80	14,500	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	

Note: Concentrations in **bold** and yellow exceed the applicable standards

NA = Not Analyzed

NE = Not Established

* = Other Standards for Domestic Water Supply (NMAC 20.6.2.3103)

** = Groundwaters exhibiting Total Disolved Solids greater than 10,000 mg/L are generally considered unsuitable as an Underground Source for Drinking Water (NMAC 20.6.2.3101)



ATTACHMENT D

Laboratory Data Reports & Chain of Custody Documentation



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

June 03, 2013

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

OrderNo.: 1305967

Dear Kyle Summers:

RE: Largo CS

Hall Environmental Analysis Laboratory received 29 sample(s) on 5/23/2013 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.

Sincerely,

Andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest GeoscienceClient Sample ID: MW-76 (2.5')Project: Largo CSCollection Date: 5/16/2013 10:30:00 AMLab ID: 1305967-001Matrix: SOLIDReceived Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 12:45:05 PM	7601
Surr: DNOP	99.9	63-147	%REC	1	5/29/2013 12:45:05 PM	7601
EPA METHOD 300.0: ANIONS					Analyst	JRR
Chloride	ND	7.5	mg/Kg	5	5/28/2013 1:10:09 PM	7649
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	CWS
Benzene	ND	0.047	mg/Kg	1	5/28/2013 3:10:31 PM	7603
Toluene	ND	0.047	mg/Kg	1	5/28/2013 3:10:31 PM	7603
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2013 3:10:31 PM	7603
Xylenes, Total	ND	0.094	mg/Kg	1	5/28/2013 3:10:31 PM	7603
Surr: 1,2-Dichloroethane-d4	97.1	70-130	%REC	1	5/28/2013 3:10:31 PM	7603
Surr: 4-Bromofluorobenzene	95.7	70-130	%REC	1	5/28/2013 3:10:31 PM	7603
Surr: Dibromofluoromethane	116	70-130	%REC	1	5/28/2013 3:10:31 PM	7603
Surr: Toluene-d8	87.0	70-130	%REC	1	5/28/2013 3:10:31 PM	7603
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: CWS
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2013 3:10:31 PM	7603
Surr: BFB	95.7	70-130	%REC	1	5/28/2013 3:10:31 PM	7603
EPA METHOD 418.1: TPH					Analyst	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 1 of 35
- R RPD outside accepted recovery limits
 - S Spike Recovery outside accepted recovery limits

Analytical Report Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest GeoscienceClient Sample ID: MW-76 (6')Project:Largo CSCollection Date: 5/16/2013 10:40:00 AMLab ID:1305967-002Matrix: SOLIDReceived Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	11	mg/Kg	1	5/29/2013 2:13:20 PM	7601
Surr: DNOP	100	63-147	%REC	1	5/29/2013 2:13:20 PM	7601
EPA METHOD 300.0: ANIONS					Analyst	JRR
Chloride	ND	7.5	mg/Kg	5	5/28/2013 1:59:48 PM	7649
EPA METHOD 8260B: VOLATILES SH	AlysesResultRLQualUnitsA METHOD 8015D: DIESEL RANGE ORGANICSDiesel Range Organics (DRO)ND11mg/KgSurr: DNOP10063-147%RECA METHOD 300.0: ANIONSND7.5mg/KgChlorideND7.5mg/KgChlorideND0.048mg/KgChlorideND0.048mg/KgSenzeneND0.048mg/KgSoure: 1,2-Dichloroethane-d495.470-130%RECSurr: 2-Dichloroethane-d495.470-130%RECSurr: 3-Bromofluorobenzene10070-130%RECSurr: 10luene-d885.570-130%RECSurr: Bibromofluoromethane11670-130%RECSurr: BFB10070-130%REC				Analyst	CWS
Benzene	ND	0.048	mg/Kg	1	5/28/2013 4:36:39 PM	7603
Toluene	ND	0.048	mg/Kg	1	5/28/2013 4:36:39 PM	7603
Ethylbenzene	ND	0.048	mg/Kg	1	5/28/2013 4:36:39 PM	7603
Xylenes, Total	ND	0.095	mg/Kg	1	5/28/2013 4:36:39 PM	7603
Surr: 1,2-Dichloroethane-d4	95.4	70-130	%REC	1	5/28/2013 4:36:39 PM	7603
Surr: 4-Bromofluorobenzene	100	70-130	%REC	1	5/28/2013 4:36:39 PM	7603
Surr: Dibromofluoromethane	116	70-130	%REC	1	5/28/2013 4:36:39 PM	7603
Surr: Toluene-d8	85.5	70-130	%REC	1	5/28/2013 4:36:39 PM	7603
EPA METHOD 8015D MOD: GASOLIN	E RANGE				Analyst	cws
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/28/2013 4:36:39 PM	7603
Surr: BFB	100	70-130	%REC	1	5/28/2013 4:36:39 PM	7603
EPA METHOD 418.1: TPH					Analyst	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 2 of 35
- R RPD outside accepted recovery limits
 - S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest GeoscienceClient Sample ID: MW-76 (18')Project: Largo CSCollection Date: 5/16/2013 11:00:00 AMLab ID: 1305967-003Matrix: SOLIDReceived Date: 5/23/2013 10:00:00 AM

ate many zeu	Datti
Analyst:	JME
/29/2013 2:35:24 PM	7601
/29/2013 2:35:24 PM	7601
Analyst:	JRR
/28/2013 2:24:37 PM	7649
Analyst:	cws
/28/2013 6:02:50 PM	7603
Analyst:	cws
/28/2013 6:02:50 PM	7603
/28/2013 6:02:50 PM	7603
Analyst:	LRW
/29/2013	7633
	28/2013 2:24:37 PM Analyst: 28/2013 6:02:50 PM 28/2013 6:02:50 PM

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

- Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 3 of 35
- R RPD outside accepted recovery limits
 - S Spike Recovery outside accepted recovery limits

Analytical Report Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest GeoscienceClient Sample ID: MW-77 (2.5')Project: Largo CSCollection Date: 5/16/2013 12:30:00 PMLab ID: 1305967-004Matrix: SOLIDReceived Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/29/2013 2:57:35 PM	7601
Surr: DNOP	109	63-147	%REC	1	5/29/2013 2:57:35 PM	7601
EPA METHOD 300.0: ANIONS					Analys	t: JRR
Chloride	170	7.5	mg/Kg	5	5/28/2013 3:14:15 PM	7649
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analys	t: CWS
Benzene	ND	0.047	mg/Kg	1	5/28/2013 6:31:32 PM	7603
Toluene	ND	0.047	mg/Kg	1	5/28/2013 6:31:32 PM	7603
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2013 6:31:32 PM	7603
Xylenes, Total	ND	0.094	mg/Kg	1	5/28/2013 6:31:32 PM	7603
Surr: 1,2-Dichloroethane-d4	93.9	70-130	%REC	1	5/28/2013 6:31:32 PM	7603
Surr: 4-Bromofluorobenzene	97.1	70-130	%REC	1	5/28/2013 6:31:32 PM	7603
Surr: Dibromofluoromethane	113	70-130	%REC	1	5/28/2013 6:31:32 PM	7603
Surr: Toluene-d8	85.2	70-130	%REC	1	5/28/2013 6:31:32 PM	7603
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analys	t: CWS
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2013 6:31:32 PM	7603
Surr: BFB	97.1	70-130	%REC	1	5/28/2013 6:31:32 PM	7603
EPA METHOD 418.1: TPH					Analys	t: LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 4 of 35
- R RPD outside accepted recovery limits
 - S Spike Recovery outside accepted recovery limits

Ana	aly	tic	al	R	ep	or	t
	-						

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT	: Southwest Geoscience		Client Sample ID: MW-77 (6')
Project:	Largo CS		Collection Date: 5/16/2013 12:40:00 PM
Lab ID:	1305967-005	Matrix: SOLID	Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analyst:	JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/29/2013 3:19:42 PM	7601
Surr: DNOP	97.8	63-147	%REC	1	5/29/2013 3:19:42 PM	7601
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	440	30	mg/Kg	20	5/28/2013 3:51:29 PM	7649
EPA METHOD 8260B: VOLATILES SI	HORT LIST				Analyst:	cws
Benzene	ND	0.046	mg/Kg	1	5/28/2013 7:00:09 PM	7603
Toluene	ND	0.046	mg/Kg	1	5/28/2013 7:00:09 PM	7603
Ethylbenzene	ND	0.046	mg/Kg	1	5/28/2013 7:00:09 PM	7603
Xylenes, Total	ND	0.093	mg/Kg	1	5/28/2013 7:00:09 PM	7603
Surr: 1,2-Dichloroethane-d4	92.4	70-130	%REC	1	5/28/2013 7:00:09 PM	7603
Surr: 4-Bromofluorobenzene	98.3	70-130	%REC	1	5/28/2013 7:00:09 PM	7603
Surr: Dibromofluoromethane	112	70-130	%REC	1	5/28/2013 7:00:09 PM	7603
Surr: Toluene-d8	83.3	70-130	%REC	1	5/28/2013 7:00:09 PM	7603
EPA METHOD 8015D MOD: GASOLIN	NE RANGE				Analyst:	CWS
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/28/2013 7:00:09 PM	7603
Surr: BFB	98.3	70-130	%REC	1	5/28/2013 7:00:09 PM	7603
EPA METHOD 418.1: TPH					Analyst:	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 5 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Analytical Report Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience Client Sample ID: MW-77 (31') Collection Date: 5/16/2013 2:02:00 PM **Project:** Largo CS Lab ID: 1305967-006 Matrix: SOLID Received Date: 5/23/2013 10:00:00 AM

ERA NETHOR MALER DIFACT RANGE ORGANICS	Analyst:	
EPA METHOD 8015D: DIESEL RANGE ORGANICS		JME
Diesel Range Organics (DRO) ND 10 mg/Kg 1	5/29/2013 3:41:54 PM	7601
Surr: DNOP 102 63-147 %REC 1	5/29/2013 3:41:54 PM	7601
EPA METHOD 300.0: ANIONS	Analyst:	JRR
Chloride 45 7.5 mg/Kg 5	5/28/2013 4:03:54 PM	7649
EPA METHOD 8260B: VOLATILES SHORT LIST	Analyst:	cws
Benzene ND 0.047 mg/Kg 1	5/28/2013 7:28:57 PM	7603
Toluene ND 0.047 mg/Kg 1	5/28/2013 7:28:57 PM	7603
Ethylbenzene ND 0.047 mg/Kg 1	5/28/2013 7:28:57 PM	7603
Xylenes, Total ND 0.093 mg/Kg 1	5/28/2013 7:28:57 PM	7603
Surr: 1,2-Dichloroethane-d4 96.4 70-130 %REC 1	5/28/2013 7:28:57 PM	7603
Surr: 4-Bromofluorobenzene 96.2 70-130 %REC 1	5/28/2013 7:28:57 PM	7603
Surr: Dibromofluoromethane 115 70-130 %REC 1	5/28/2013 7:28:57 PM	7603
Surr: Toluene-d8 84.8 70-130 %REC 1	5/28/2013 7:28:57 PM	7603
EPA METHOD 8015D MOD: GASOLINE RANGE	Analyst:	CWS
Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1	5/28/2013 7:28:57 PM	7603
Surr: BFB 96.2 70-130 %REC 1	5/28/2013 7:28:57 PM	7603
EPA METHOD 418.1: TPH	Analyst:	LRW
Petroleum Hydrocarbons, TR ND 20 mg/Kg 1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level. Value above quantitation range E
- Analyte detected below quantitation limits J
- P
- Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- Analyte detected in the associated Method Blank в
- Holding times for preparation or analysis exceeded н
- ND Not Detected at the Reporting Limit Page 6 of 35
- R RPD outside accepted recovery limits
 - S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest GeoscienceClient Sample ID: SB-78 (2.5')Project: Largo CSCollection Date: 5/16/2013 3:10:00 PMLab ID: 1305967-007Matrix: SOLIDReceived Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	E ORGANICS				Analyst:	JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/29/2013 4:04:07 PM	7601
Surr: DNOP	101	63-147	%REC	1	5/29/2013 4:04:07 PM	7601
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	500	30	mg/Kg	20	5/28/2013 5:05:58 PM	7649
EPA METHOD 8260B: VOLATILES SH	IORT LIST				Analyst:	CWS
Benzene	ND	0.047	mg/Kg	1	5/28/2013 7:57:39 PM	7603
Toluene	ND	0.047	mg/Kg	1	5/28/2013 7:57:39 PM	7603
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2013 7:57:39 PM	7603
Xylenes, Total	ND	0.094	mg/Kg	1	5/28/2013 7:57:39 PM	7603
Surr: 1,2-Dichloroethane-d4	93.3	70-130	%REC	1	5/28/2013 7:57:39 PM	7603
Surr: 4-Bromofluorobenzene	97.1	70-130	%REC	1	5/28/2013 7:57:39 PM	7603
Surr: Dibromofluoromethane	112	70-130	%REC	1	5/28/2013 7:57:39 PM	7603
Surr: Toluene-d8	85.0	70-130	%REC	1	5/28/2013 7:57:39 PM	7603
EPA METHOD 8015D MOD: GASOLIN	E RANGE				Analyst:	cws
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2013 7:57:39 PM	7603
Surr: BFB	97.1	70-130	%REC	1	5/28/2013 7:57:39 PM	7603
EPA METHOD 418.1: TPH					Analyst:	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 7 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience Client Sample ID: SB-78 (6') Project: Largo CS Collection Date: 5/16/2013 3:15:00 PM Received Date: 5/23/2013 10:00:00 AM Lab ID: 1305967-008 Matrix: SOLID

sult	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS				Analyst:	JME
ND	10	mg/Kg	1	5/29/2013 4:26:21 PM	7601
94.0	63-147	%REC	1	5/29/2013 4:26:21 PM	7601
				Analyst:	JRR
280	30	mg/Kg	20	5/28/2013 5:55:37 PM	7649
IST				Analyst:	CWS
ND	0.049	mg/Kg	1	5/28/2013 8:26:28 PM	7603
ND	0.049	mg/Kg	1	5/28/2013 8:26:28 PM	7603
ND	0.049	mg/Kg	1	5/28/2013 8:26:28 PM	7603
ND	0.098	mg/Kg	1	5/28/2013 8:26:28 PM	7603
91.6	70-130	%REC	1	5/28/2013 8:26:28 PM	7603
94.4	70-130	%REC	1	5/28/2013 8:26:28 PM	7603
108	70-130	%REC	1	5/28/2013 8:26:28 PM	7603
81.9	70-130	%REC	1	5/28/2013 8:26:28 PM	7603
GE				Analyst:	cws
ND	4.9	mg/Kg	1	5/28/2013 8:26:28 PM	7603
94.4	70-130	%REC	1	5/28/2013 8:26:28 PM	7603
				Analyst:	LRW
ND	20	mg/Kg	1	5/29/2013	7633
	NICS ND 94.0 280 ST ND ND 91.6 94.4 108 81.9 GE ND 94.4 ND	NICS ND 10 94.0 63-147 280 30 ST ND 0.049 ND 0.049 ND 0.049 ND 0.049 ND 0.049 ND 0.049 ST MD 0.049 ND 0.049 ST 91.6 70-130 94.4 70-130 SE ND 4.9 94.4 70-130 ND 20	NICS ND 10 mg/Kg 94.0 63-147 %REC 280 30 mg/Kg ST	KL Quar Onits Dr NICS ND 10 mg/Kg 1 94.0 63-147 %REC 1 280 30 mg/Kg 20 ST	KL Quar Units DF Date Analyst: ND 10 mg/Kg 1 5/29/2013 4:26:21 PM 94.0 63-147 %REC 1 5/29/2013 4:26:21 PM 280 30 mg/Kg 20 5/28/2013 4:26:21 PM ST Analyst: 280 30 mg/Kg 20 5/28/2013 5:55:37 PM ST Analyst: ND 0.049 mg/Kg 1 5/28/2013 8:26:28 PM ND 0.098 mg/Kg 1 5/28/2013 8:26:28 PM 91.6 70-130 %REC 1 5/28/2013 8:26:28 PM 94.4 70-130 %REC 1 5/28/2013 8:26:28 PM 81.9 70-130 %REC 1 5/28/2013 8:26:28

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

- * Value exceeds Maximum Contaminant Level. Value above quantitation range
- Е J
- Analyte detected below quantitation limits Р
- Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- Analyte detected in the associated Method Blank B
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 8 of 35
- RPD outside accepted recovery limits R
 - S Spike Recovery outside accepted recovery limits
Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Southwest Geoscience
 Client Sample ID: MW-79 (2.5')

 Project:
 Largo CS
 Collection Date: 5/20/2013 10:00:00 AM

 Lab ID:
 1305967-009
 Matrix: SOLID
 Received Date: 5/23/2013 10:00:00 AM

Analyses	Kesult	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	IGE ORGANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 4:48:23 PM	7601
Surr: DNOP	94.0	63-147	%REC	1	5/29/2013 4:48:23 PM	7601
EPA METHOD 300.0: ANIONS					Analyst	JRR
Chloride	ND	7.5	mg/Kg	5	5/28/2013 6:08:02 PM	7649
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	cws
Benzene	ND	0.047	mg/Kg	1	5/28/2013 8:55:12 PM	7603
Toluene	ND	0.047	mg/Kg	1	5/28/2013 8:55:12 PM	7603
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2013 8:55:12 PM	7603
Xylenes, Total	ND	0.094	mg/Kg	1	5/28/2013 8:55:12 PM	7603
Surr: 1,2-Dichloroethane-d4	88.5	70-130	%REC	1	5/28/2013 8:55:12 PM	7603
Surr: 4-Bromofluorobenzene	99.5	70-130	%REC	1	5/28/2013 8:55:12 PM	7603
Surr: Dibromofluoromethane	108	70-130	%REC	1	5/28/2013 8:55:12 PM	7603
Surr: Toluene-d8	81.8	70-130	%REC	1	5/28/2013 8:55:12 PM	7603
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	CWS
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2013 8:55:12 PM	7603
Surr: BFB	99.5	70-130	%REC	1	5/28/2013 8:55:12 PM	7603
EPA METHOD 418.1: TPH					Analyst	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 9 of 35
- R RPD outside accepted recovery limits
 - S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Southwest Geoscience
 Client Sample ID: MW-79 (6')

 Project: Largo CS
 Collection Date: 5/20/2013 10:20:00 AM

 Lab ID: 1305967-010
 Matrix: SOLID

 Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	KL Qu	ial Units	Dr	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	IGE ORGANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 5:10:33 PM	7601
Surr: DNOP	103	63-147	%REC	1	5/29/2013 5:10:33 PM	7601
EPA METHOD 300.0: ANIONS					Analys	t: JRR
Chloride	ND	7.5	mg/Kg	5	5/28/2013 6:32:52 PM	7649
EPA METHOD 8260B: VOLATILES SHORT LIST					Analys	t: CWS
Benzene	ND	0.047	mg/Kg	1	5/28/2013 9:24:01 PM	7603
Toluene	ND	0.047	mg/Kg	1	5/28/2013 9:24:01 PM	7603
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2013 9:24:01 PM	7603
Xylenes, Total	ND	0.094	mg/Kg	1	5/28/2013 9:24:01 PM	7603
Surr: 1,2-Dichloroethane-d4	91.1	70-130	%REC	1	5/28/2013 9:24:01 PM	7603
Surr: 4-Bromofluorobenzene	99.0	70-130	%REC	1	5/28/2013 9:24:01 PM	7603
Surr: Dibromofluoromethane	112	70-130	%REC	1	5/28/2013 9:24:01 PM	7603
Surr: Toluene-d8	86.4	70-130	%REC	1	5/28/2013 9:24:01 PM	7603
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analys	t: CWS
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2013 9:24:01 PM	7603
Surr: BFB	99.0	70-130	%REC	1	5/28/2013 9:24:01 PM	7603
EPA METHOD 418.1: TPH					Analys	t: LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 10 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Southwest Geoscience
 Client Sample ID: MW-79 (28')

 Project:
 Largo CS
 Collection Date: 5/20/2013 12:15:00 PM

 Lab ID:
 1305967-011
 Matrix: SOLID
 Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL QI	ial Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analyst:	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 5:32:33 PM	7601
Surr: DNOP	96.4	63-147	%REC	1	5/29/2013 5:32:33 PM	7601
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	11	1.5	mg/Kg	1	5/28/2013 6:57:41 PM	7649
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	cws
Benzene	ND	0.047	mg/Kg	1	5/28/2013 9:52:40 PM	7603
Toluene	ND	0.047	mg/Kg	1	5/28/2013 9:52:40 PM	7603
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2013 9:52:40 PM	7603
Xylenes, Total	ND	0.094	mg/Kg	1	5/28/2013 9:52:40 PM	7603
Surr: 1,2-Dichloroethane-d4	95.6	70-130	%REC	1	5/28/2013 9:52:40 PM	7603
Surr: 4-Bromofluorobenzene	97.4	70-130	%REC	1	5/28/2013 9:52:40 PM	7603
Surr: Dibromofluoromethane	115	70-130	%REC	1	5/28/2013 9:52:40 PM	7603
Surr: Toluene-d8	85.3	70-130	%REC	1	5/28/2013 9:52:40 PM	7603
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst:	cws
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2013 9:52:40 PM	7603
Surr: BFB	97.4	70-130	%REC	1	5/28/2013 9:52:40 PM	7603
EPA METHOD 418.1: TPH					Analyst:	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 11 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

 CLIENT:
 Southwest Geoscience
 Client Sample ID: MW-80 (2.5')

 Project:
 Largo CS
 Collection Date: 5/20/2013 2:00:00 PM

 Lab ID:
 1305967-012
 Matrix:
 SOLID
 Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analyst:	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 6:16:38 PM	7601
Surr: DNOP	97.2	63-147	%REC	1	5/29/2013 6:16:38 PM	7601
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	280	30	mg/Kg	20	5/28/2013 7:34:55 PM	7649
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst:	cws
Benzene	ND	0.047	mg/Kg	1	5/28/2013 10:21:17 PM	7603
Toluene	ND	0.047	mg/Kg	1	5/28/2013 10:21:17 PM	7603
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2013 10:21:17 PM	7603
Xylenes, Total	ND	0.095	mg/Kg	1	5/28/2013 10:21:17 PM	7603
Surr: 1,2-Dichloroethane-d4	94.7	70-130	%REC	1	5/28/2013 10:21:17 PM	7603
Surr: 4-Bromofluorobenzene	99.8	70-130	%REC	1	5/28/2013 10:21:17 PM	7603
Surr: Dibromofluoromethane	111	70-130	%REC	1	5/28/2013 10:21:17 PM	7603
Surr: Toluene-d8	87.6	70-130	%REC	1	5/28/2013 10:21:17 PM	7603
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst:	cws
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2013 10:21:17 PM	7603
Surr: BFB	99.8	70-130	%REC	1	5/28/2013 10:21:17 PM	7603
EPA METHOD 418.1: TPH					Analyst:	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 12 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Southwest Geoscience
 Client Sample ID: MW-80 (6')

 Project: Largo CS
 Collection Date: 5/20/2013 2:10:00 PM

 Lab ID: 1305967-013
 Matrix: SOLID
 Received Date: 5/23/2013 10:00:00 AM

 Analyses
 Paceult
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 Qual Units
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 Deta Analyzed

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	GE ORGANICS				Analyst:	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 6:38:45 PM	7601
Surr: DNOP	102	63-147	%REC	1	5/29/2013 6:38:45 PM	7601
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	130	30	mg/Kg	20	5/28/2013 8:24:33 PM	7649
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst:	CWS
Benzene	ND	0.046	mg/Kg	1	5/29/2013 1:13:20 AM	7603
Toluene	ND	0.046	mg/Kg	1	5/29/2013 1:13:20 AM	7603
Ethylbenzene	ND	0.046	mg/Kg	1	5/29/2013 1:13:20 AM	7603
Xylenes, Total	ND	0.092	mg/Kg	1	5/29/2013 1:13:20 AM	7603
Surr: 1,2-Dichloroethane-d4	91.1	70-130	%REC	1	5/29/2013 1:13:20 AM	7603
Surr: 4-Bromofluorobenzene	100	70-130	%REC	1	5/29/2013 1:13:20 AM	7603
Surr: Dibromofluoromethane	118	70-130	%REC	1	5/29/2013 1:13:20 AM	7603
Surr: Toluene-d8	82.9	70-130	%REC	1	5/29/2013 1:13:20 AM	7603
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst:	CWS
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/29/2013 1:13:20 AM	7603
Surr: BFB	100	70-130	%REC	1	5/29/2013 1:13:20 AM	7603
EPA METHOD 418.1: TPH					Analyst:	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 13 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

- L

Hall Environmental Analysis Laboratory, Inc.

CLIENT	: Southwest Geoscience		Client Sample ID: MW-80 (18')
Project:	Largo CS		Collection Date: 5/20/2013 2:25:00 PM
Lab ID:	1305967-014	Matrix: SOLID	Received Date: 5/23/2013 10:00:00 AM

Analyses	Kesult	KL Qu	al Units	Dr	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	IGE ORGANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/29/2013 7:00:39 PM	7601
Surr: DNOP	96.6	63-147	%REC	1	5/29/2013 7:00:39 PM	7601
EPA METHOD 300.0: ANIONS					Analys	t: JRR
Chloride	630	30	mg/Kg	20	5/28/2013 8:49:23 PM	7649
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analys	t: CWS
Benzene	ND	0.047	mg/Kg	1	5/29/2013 1:42:06 AM	7603
Toluene	ND	0.047	mg/Kg	1	5/29/2013 1:42:06 AM	7603
Ethylbenzene	ND	0.047	mg/Kg	1	5/29/2013 1:42:06 AM	7603
Xylenes, Total	ND	0.094	mg/Kg	1	5/29/2013 1:42:06 AM	7603
Surr: 1,2-Dichloroethane-d4	92.8	70-130	%REC	1	5/29/2013 1:42:06 AM	7603
Surr: 4-Bromofluorobenzene	97.0	70-130	%REC	1	5/29/2013 1:42:06 AM	7603
Surr: Dibromofluoromethane	115	70-130	%REC	1	5/29/2013 1:42:06 AM	7603
Surr: Toluene-d8	83.4	70-130	%REC	1	5/29/2013 1:42:06 AM	7603
EPA METHOD 8015D MOD: GASO	INE RANGE				Analys	t: CWS
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/29/2013 1:42:06 AM	7603
Surr: BFB	97.0	70-130	%REC	1	5/29/2013 1:42:06 AM	7603
EPA METHOD 418.1: TPH					Analys	t: LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

Qualifiers: * Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2 for VOA and TOC only.

RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 14 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Southwest Geoscience
 Client Sample ID: SB-81 (2.5')

 Project:
 Largo CS
 Collection Date: 5/20/2013 3:40:00 PM

 Lab ID:
 1305967-015
 Matrix: SOLID
 Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	ial Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	IGE ORGANICS		ě.		Analyst	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 7:22:41 PM	7601
Surr: DNOP	96.4	63-147	%REC	1	5/29/2013 7:22:41 PM	7601
EPA METHOD 300.0: ANIONS					Analyst	JRR
Chloride	ND	7.5	mg/Kg	5	5/28/2013 9:01:47 PM	7649
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	cws
Benzene	ND	0.047	mg/Kg	1	5/29/2013 2:10:42 AM	7603
Toluene	ND	0.047	mg/Kg	1	5/29/2013 2:10:42 AM	7603
Ethylbenzene	ND	0.047	mg/Kg	1	5/29/2013 2:10:42 AM	7603
Xylenes, Total	ND	0.093	mg/Kg	1	5/29/2013 2:10:42 AM	7603
Surr: 1,2-Dichloroethane-d4	89.8	70-130	%REC	1	5/29/2013 2:10:42 AM	7603
Surr: 4-Bromofluorobenzene	101	70-130	%REC	1	5/29/2013 2:10:42 AM	7603
Surr: Dibromofluoromethane	112	70-130	%REC	1	5/29/2013 2:10:42 AM	7603
Surr: Toluene-d8	84.8	70-130	%REC	1	5/29/2013 2:10:42 AM	7603
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	CWS
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/29/2013 2:10:42 AM	7603
Surr: BFB	101	70-130	%REC	1	5/29/2013 2:10:42 AM	7603
EPA METHOD 418.1: TPH					Analyst	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level.E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- r Sample pri greater than 2 for VOA and TOC
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 15 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Southwest Geoscience
 Client Sample ID: SB-81 (6')

 Project: Largo CS
 Collection Date: 5/20/2013 3:50:00 PM

 Lab ID: 1305967-016
 Matrix: SOLID
 Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	ial Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	IGE ORGANICS			· · · ·	Analyst	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 7:44:38 PM	7601
Surr: DNOP	110	63-147	%REC	1	5/29/2013 7:44:38 PM	7601
EPA METHOD 300.0: ANIONS					Analyst	: JRR
Chloride	83	7.5	mg/Kg	5	5/28/2013 9:26:37 PM	7649
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	CWS
Benzene	ND	0.046	mg/Kg	1	5/29/2013 2:39:19 AM	7603
Toluene	ND	0.046	mg/Kg	1	5/29/2013 2:39:19 AM	7603
Ethylbenzene	ND	0.046	mg/Kg	1	5/29/2013 2:39:19 AM	7603
Xylenes, Total	ND	0.092	mg/Kg	1	5/29/2013 2:39:19 AM	7603
Surr: 1,2-Dichloroethane-d4	93.7	70-130	%REC	1	5/29/2013 2:39:19 AM	7603
Surr: 4-Bromofluorobenzene	100	70-130	%REC	1	5/29/2013 2:39:19 AM	7603
Surr: Dibromofluoromethane	116	70-130	%REC	1	5/29/2013 2:39:19 AM	7603
Surr: Toluene-d8	83.3	70-130	%REC	. 1	5/29/2013 2:39:19 AM	7603
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	CWS
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/29/2013 2:39:19 AM	7603
Surr: BFB	100	70-130	%REC	1	5/29/2013 2:39:19 AM	7603
EPA METHOD 418.1: TPH					Analyst	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 16 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Southwest Geoscience
 Client Sample ID: SB-82 (2.5')

 Project:
 Largo CS
 Collection Date: 5/20/2013 4:00:00 PM

 Lab ID:
 1305967-017
 Matrix: SOLID
 Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/29/2013 8:06:38 PM	7601
Surr: DNOP	98.0	63-147	%REC	1	5/29/2013 8:06:38 PM	7601
EPA METHOD 300.0: ANIONS					Analys	t: JRR
Chloride	ND	7.5	mg/Kg	5	5/28/2013 9:51:26 PM	7649
EPA METHOD 8260B: VOLATILES SHORT LIST					Analys	t: CWS
Benzene	ND	0.046	mg/Kg	1	5/29/2013 3:08:11 AM	7603
Toluene	ND	0.046	mg/Kg	1	5/29/2013 3:08:11 AM	7603
Ethylbenzene	ND	0.046	mg/Kg	1	5/29/2013 3:08:11 AM	7603
Xylenes, Total	ND	0.093	mg/Kg	1	5/29/2013 3:08:11 AM	7603
Surr: 1,2-Dichloroethane-d4	90.8	70-130	%REC	1	5/29/2013 3:08:11 AM	7603
Surr: 4-Bromofluorobenzene	102	70-130	%REC	1	5/29/2013 3:08:11 AM	7603
Surr: Dibromofluoromethane	111	70-130	%REC	1	5/29/2013 3:08:11 AM	7603
Surr: Toluene-d8	83.8	70-130	%REC	1	5/29/2013 3:08:11 AM	7603
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analys	t: CWS
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/29/2013 3:08:11 AM	7603
Surr: BFB	102	70-130	%REC	1	5/29/2013 3:08:11 AM	7603
EPA METHOD 418.1: TPH					Analys	t: LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 17 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience Client Sample ID: SB-82 (6') Project: Largo CS Collection Date: 5/20/2013 4:10:00 PM Lab ID: 1305967-018 Matrix: SOLID Received Date: 5/23/2013 10:00:00 AM -

Analyses	Result	RL Ç	Jual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analyst:	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 8:28:29 PM	7601
Surr: DNOP	104	63-147	%REC	1	5/29/2013 8:28:29 PM	7601
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	410	30	mg/Kg	20	5/28/2013 10:53:29 PM	7649
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst:	cws
Benzene	ND	0.048	mg/Kg	1	5/29/2013 3:36:50 AM	7603
Toluene	ND	0.048	mg/Kg	1	5/29/2013 3:36:50 AM	7603
Ethylbenzene	ND	0.048	mg/Kg	1	5/29/2013 3:36:50 AM	7603
Xylenes, Total	ND	0.096	mg/Kg	1	5/29/2013 3:36:50 AM	7603
Surr: 1,2-Dichloroethane-d4	92.2	70-130	%REC	1	5/29/2013 3:36:50 AM	7603
Surr: 4-Bromofluorobenzene	101	70-130	%REC	1	5/29/2013 3:36:50 AM	7603
Surr: Dibromofluoromethane	113	70-130	%REC	1	5/29/2013 3:36:50 AM	7603
Surr: Toluene-d8	85.1	70-130	%REC	1	5/29/2013 3:36:50 AM	7603
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst:	CWS
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/29/2013 3:36:50 AM	7603
Surr: BFB	101	70-130	%REC	1	5/29/2013 3:36:50 AM	7603
EPA METHOD 418.1: TPH					Analyst:	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level. E Value above quantitation range
- Analyte detected below quantitation limits J
- Sample pH greater than 2 for VOA and TOC only. Р
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 18 of 35
- RPD outside accepted recovery limits R
- S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest GeoscienceClienProject:Largo CSCollLab ID:1305967-019Matrix: SOLIDRe

Client Sample ID: MW-83 (2.5') Collection Date: 5/21/2013 7:50:00 AM Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analyst:	JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/29/2013 8:50:27 PM	7601
Surr: DNOP	89.5	63-147	%REC	1	5/29/2013 8:50:27 PM	7601
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	250	30	mg/Kg	20	5/29/2013 3:22:57 PM	7656
EPA METHOD 8260B: VOLATILES SH	IORT LIST				Analyst:	cws
Benzene	ND	0.046	mg/Kg	1	5/29/2013 4:05:39 AM	7603
Toluene	ND	0.046	mg/Kg	1	5/29/2013 4:05:39 AM	7603
Ethylbenzene	ND	0.046	mg/Kg	1	5/29/2013 4:05:39 AM	7603
Xylenes, Total	ND	0.092	mg/Kg	1	5/29/2013 4:05:39 AM	7603
Surr: 1,2-Dichloroethane-d4	93.9	70-130	%REC	1	5/29/2013 4:05:39 AM	7603
Surr: 4-Bromofluorobenzene	99.7	70-130	%REC	1	5/29/2013 4:05:39 AM	7603
Surr: Dibromofluoromethane	115	70-130	%REC	1	5/29/2013 4:05:39 AM	7603
Surr: Toluene-d8	84.0	70-130	%REC	1	5/29/2013 4:05:39 AM	7603
EPA METHOD 8015D MOD: GASOLIN	E RANGE				Analyst:	cws
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/29/2013 4:05:39 AM	7603
Surr: BFB	99.7	70-130	%REC	1	5/29/2013 4:05:39 AM	7603
EPA METHOD 418.1: TPH					Analyst:	LRW
Petroleum Hydrocarbons, TR	31	20	mg/Kg	1	5/29/2013	7633

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 19 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

1305967-020

Project: Largo CS

Lab ID:

Client Sample ID: MW-83 (6') Collection Date: 5/21/2013 8:45:00 AM Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	GE ORGANICS				Analyst:	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 9:12:14 PM	7601
Surr: DNOP	96.6	63-147	%REC	1	5/29/2013 9:12:14 PM	7601
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	89	7.5	mg/Kg	5	5/29/2013 3:35:22 PM	7656
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	cws
Benzene	ND	0.046	mg/Kg	1	5/29/2013 4:34:26 AM	7603
Toluene	ND	0.046	mg/Kg	1	5/29/2013 4:34:26 AM	7603
Ethylbenzene	ND	0.046	mg/Kg	1	5/29/2013 4:34:26 AM	7603
Xylenes, Total	ND	0.092	mg/Kg	1	5/29/2013 4:34:26 AM	7603
Surr: 1,2-Dichloroethane-d4	89.9	70-130	%REC	1	5/29/2013 4:34:26 AM	7603
Surr: 4-Bromofluorobenzene	98.0	70-130	%REC	1	5/29/2013 4:34:26 AM	7603
Surr: Dibromofluoromethane	113	70-130	%REC	1	5/29/2013 4:34:26 AM	7603
Surr: Toluene-d8	83.6	70-130	%REC	1	5/29/2013 4:34:26 AM	7603
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	cws
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/29/2013 4:34:26 AM	7603
Surr: BFB	98.0	70-130	%REC	1	5/29/2013 4:34:26 AM	7603
EPA METHOD 418.1: TPH					Analyst:	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7633

Matrix: SOLID

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

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2 for VOA and TOC only.

RL Reporting Detection Limit

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit Page 20 of 35

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience Client Sample ID: MW-83 (16') Collection Date: 5/21/2013 9:05:00 AM Project: Largo CS Lab ID: 1305967-021 Matrix: SOLID Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/29/2013 9:34:03 PM	7608
Surr: DNOP	99.9	63-147	%REC	1	5/29/2013 9:34:03 PM	7608
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	8.8	7.5	mg/Kg	5	5/29/2013 4:00:11 PM	7656
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	cws
Benzene	ND	0.049	mg/Kg	1	5/29/2013 6:29:09 AM	7604
Toluene	ND	0.049	mg/Kg	1	5/29/2013 6:29:09 AM	7604
Ethylbenzene	ND	0.049	mg/Kg	1	5/29/2013 6:29:09 AM	7604
Xylenes, Total	ND	0.097	mg/Kg	1	5/29/2013 6:29:09 AM	7604
Surr: 1,2-Dichloroethane-d4	91.4	70-130	%REC	1	5/29/2013 6:29:09 AM	7604
Surr: 4-Bromofluorobenzene	97.2	70-130	%REC	1	5/29/2013 6:29:09 AM	7604
Surr: Dibromofluoromethane	117	70-130	%REC	1	5/29/2013 6:29:09 AM	7604
Surr: Toluene-d8	83.0	70-130	%REC	1	5/29/2013 6:29:09 AM	7604
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	cws
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/29/2013 6:29:09 AM	7604
Surr: BFB	97.2	70-130	%REC	1	5/29/2013 6:29:09 AM	7604
EPA METHOD 418.1: TPH					Analyst	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7634

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

* Value exceeds Maximum Contaminant Level. Qualifiers:

E Value above quantitation range

- J Analyte detected below quantitation limits
- Р Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 21 of 35
- RPD outside accepted recovery limits R
- S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest GeoscienceClient Sample ID: SB-84 (2.5')Project: Largo CSCollection Date: 5/21/2013 10:10:00 AMLab ID: 1305967-022Matrix: SOLIDReceived Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 11:01:19 PM	7608
Surr: DNOP	115	63-147	%REC	1	5/29/2013 11:01:19 PM	7608
EPA METHOD 300.0: ANIONS					Analyst	JRR
Chloride	ND	7.5	mg/Kg	5	5/30/2013 5:12:48 PM	7656
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	DAM
Benzene	ND	0.046	mg/Kg	1	5/31/2013 3:41:00 PM	7604
Toluene	ND	0.046	mg/Kg	1	5/31/2013 3:41:00 PM	7604
Ethylbenzene	ND	0.046	mg/Kg	1	5/31/2013 3:41:00 PM	7604
Xylenes, Total	ND	0.092	mg/Kg	1	5/31/2013 3:41:00 PM	7604
Surr: 1,2-Dichloroethane-d4	85.6	70-130	%REC	1	5/31/2013 3:41:00 PM	7604
Surr: 4-Bromofluorobenzene	81.0	70-130	%REC	1	5/31/2013 3:41:00 PM	7604
Surr: Dibromofluoromethane	87.8	70-130	%REC	1	5/31/2013 3:41:00 PM	7604
Surr: Toluene-d8	99.1	70-130	%REC	1	5/31/2013 3:41:00 PM	7604
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	DAM
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/31/2013 3:41:00 PM	7604
Surr: BFB	81.0	70-130	%REC	1	5/31/2013 3:41:00 PM	7604
EPA METHOD 418.1: TPH					Analyst	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7634

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 22 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience Project: Largo CS

1305967-023

Lab ID:

Client Sample ID: SB-84 (6') Collection Date: 5/21/2013 10:15:00 AM Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS				Analyst:	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/29/2013 11:23:00 PM	7608
Surr: DNOP	133	63-147	%REC	1	5/29/2013 11:23:00 PM	7608
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	11	7.5	mg/Kg	5	5/30/2013 5:37:39 PM	7656
EPA METHOD 8260B: VOLATILES SH	ORT LIST				Analyst:	DAM
Benzene	ND	0.047	mg/Kg	1	5/31/2013 5:05:19 PM	7604
Toluene	ND	0.047	mg/Kg	1	5/31/2013 5:05:19 PM	7604
Ethylbenzene	ND	0.047	mg/Kg	1	5/31/2013 5:05:19 PM	7604
Xylenes, Total	ND	0.095	mg/Kg	1	5/31/2013 5:05:19 PM	7604
Surr: 1,2-Dichloroethane-d4	87.1	70-130	%REC	1	5/31/2013 5:05:19 PM	7604
Surr: 4-Bromofluorobenzene	84.3	70-130	%REC	1	5/31/2013 5:05:19 PM	7604
Surr: Dibromofluoromethane	90.1	70-130	%REC	1	5/31/2013 5:05:19 PM	7604
Surr: Toluene-d8	97.4	70-130	%REC	1	5/31/2013 5:05:19 PM	7604
EPA METHOD 8015D MOD: GASOLIN	E RANGE				Analyst	DAM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/31/2013 5:05:19 PM	7604
Surr: BFB	84.3	70-130	%REC	1	5/31/2013 5:05:19 PM	7604
EPA METHOD 418.1: TPH					Analyst	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7634

Matrix: SOLID

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 23 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

1305967-024

Project: Largo CS

Lab ID:

Client Sample ID: SB-85 (2.5') Collection Date: 5/21/2013 10:30:00 AM Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/29/2013 11:44:49 PM	7608
Surr: DNOP	101	63-147	%REC	1	5/29/2013 11:44:49 PM	7608
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	ND	7.5	mg/Kg	5	5/30/2013 6:27:17 PM	7656
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	DAM
Benzene	ND	0.048	mg/Kg	1	5/31/2013 5:33:43 PM	7604
Toluene	ND	0.048	mg/Kg	1	5/31/2013 5:33:43 PM	7604
Ethylbenzene	ND	0.048	mg/Kg	1	5/31/2013 5:33:43 PM	7604
Xylenes, Total	ND	0.096	mg/Kg	1	5/31/2013 5:33:43 PM	7604
Surr: 1,2-Dichloroethane-d4	86.6	70-130	%REC	1	5/31/2013 5:33:43 PM	7604
Surr: 4-Bromofluorobenzene	84.0	70-130	%REC	1	5/31/2013 5:33:43 PM	7604
Surr: Dibromofluoromethane	90.1	70-130	%REC	1	5/31/2013 5:33:43 PM	7604
Surr: Toluene-d8	98.3	70-130	%REC	1	5/31/2013 5:33:43 PM	7604
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	DAM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/31/2013 5:33:43 PM	7604
Surr: BFB	84.0	70-130	%REC	1	5/31/2013 5:33:43 PM	7604
EPA METHOD 418.1: TPH					Analyst:	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7634

Matrix: SOLID

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

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 24 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Southwest Geoscience
 Client Sample ID: SB-85 (6')

 Project:
 Largo CS

 Lab ID:
 1305967-025

 Matrix:
 SOLID

 Received Date:
 5/23/2013 10:00:00 AM

Analyses	Result	RL QI	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/30/2013 12:06:37 AM	7608
Surr: DNOP	97.3	63-147	%REC	1	5/30/2013 12:06:37 AN	7608
EPA METHOD 300.0: ANIONS					Analys	t: JRR
Chloride	ND	7.5	mg/Kg	5	5/30/2013 6:52:06 PM	7656
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analys	t: DAM
Benzene	ND	0.047	mg/Kg	1	5/31/2013 6:01:47 PM	7604
Toluene	ND	0.047	mg/Kg	1	5/31/2013 6:01:47 PM	7604
Ethylbenzene	ND	0.047	mg/Kg	1	5/31/2013 6:01:47 PM	7604
Xylenes, Total	ND	0.093	mg/Kg	1	5/31/2013 6:01:47 PM	7604
Surr: 1,2-Dichloroethane-d4	87.0	70-130	%REC	1	5/31/2013 6:01:47 PM	7604
Surr: 4-Bromofluorobenzene	83.7	70-130	%REC	1	5/31/2013 6:01:47 PM	7604
Surr: Dibromofluoromethane	92.0	70-130	%REC	1	5/31/2013 6:01:47 PM	7604
Surr: Toluene-d8	99.4	70-130	%REC	1	5/31/2013 6:01:47 PM	7604
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analys	t: DAM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/31/2013 6:01:47 PM	7604
Surr: BFB	83.7	70-130	%REC	1	5/31/2013 6:01:47 PM	7604
EPA METHOD 418.1: TPH					Analys	t: LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7634

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 25 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Project: Largo CS Lab ID: 1305967-026

Client Sample ID: SB-86 (2.5') Collection Date: 5/21/2013 10:45:00 AM Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS				Analyst:	JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/30/2013 12:28:28 AM	7608
Surr: DNOP	101	63-147	%REC	1	5/30/2013 12:28:28 AM	7608
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	ND	7.5	mg/Kg	5	5/30/2013 7:16:55 PM	7656
EPA METHOD 8260B: VOLATILES SH	ORT LIST				Analyst	DAM
Benzene	ND	0.046	mg/Kg	1	5/31/2013 6:30:01 PM	7604
Toluene	ND	0.046	mg/Kg	1	5/31/2013 6:30:01 PM	7604
Ethylbenzene	ND	0.046	mg/Kg	1	5/31/2013 6:30:01 PM	7604
Xylenes, Total	ND	0.093	mg/Kg	1	5/31/2013 6:30:01 PM	7604
Surr: 1,2-Dichloroethane-d4	82.6	70-130	%REC	1	5/31/2013 6:30:01 PM	7604
Surr: 4-Bromofluorobenzene	81.8	70-130	%REC	1	5/31/2013 6:30:01 PM	7604
Surr: Dibromofluoromethane	87.6	70-130	%REC	1	5/31/2013 6:30:01 PM	7604
Surr: Toluene-d8	98.3	70-130	%REC	1	5/31/2013 6:30:01 PM	7604
EPA METHOD 8015D MOD: GASOLINI	E RANGE				Analyst:	DAM
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/31/2013 6:30:01 PM	7604
Surr: BFB	81.8	70-130	%REC	1	5/31/2013 6:30:01 PM	7604
EPA METHOD 418.1: TPH					Analyst:	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7634

Matrix: SOLID

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 26 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Lab Order 1305967

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Project: Largo CS Lab ID: 1305967-027

Client Sample ID: SB-86 (6') Collection Date: 5/21/2013 10:50:00 AM Received Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analyst:	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/30/2013 12:50:09 AM	7608
Surr: DNOP	94.6	63-147	%REC	1	5/30/2013 12:50:09 AM	7608
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	ND	7.5	mg/Kg	5	5/30/2013 2:43:49 PM	7656
EPA METHOD 8260B: VOLATILES SI	HORT LIST				Analyst:	DAM
Benzene	ND	0.047	mg/Kg	1	5/31/2013 6:58:23 PM	7604
Toluene	ND	0.047	mg/Kg	1	5/31/2013 6:58:23 PM	7604
Ethylbenzene	ND	0.047	mg/Kg	1	5/31/2013 6:58:23 PM	7604
Xylenes, Total	ND	0.093	mg/Kg	1	5/31/2013 6:58:23 PM	7604
Surr: 1,2-Dichloroethane-d4	88.1	70-130	%REC	1	5/31/2013 6:58:23 PM	7604
Surr: 4-Bromofluorobenzene	83.1	70-130	%REC	1	5/31/2013 6:58:23 PM	7604
Surr: Dibromofluoromethane	92.9	70-130	%REC	1	5/31/2013 6:58:23 PM	7604
Surr: Toluene-d8	96.7	70-130	%REC	1	5/31/2013 6:58:23 PM	7604
EPA METHOD 8015D MOD: GASOLIN	NE RANGE				Analyst:	DAM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/31/2013 6:58:23 PM	7604
Surr: BFB	83.1	70-130	%REC	1	5/31/2013 6:58:23 PM	7604
EPA METHOD 418.1: TPH					Analyst:	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7634

Matrix: SOLID

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- $\label{eq:posterior} P \qquad \text{Sample pH greater than 2 for VOA and TOC only.}$
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 27 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Southwest Geoscience
 Client Sample ID: SB-87 (2.5')

 Project:
 Largo CS
 Collection Date: 5/21/2013 11:00:00 AM

 Lab ID:
 1305967-028
 Matrix: SOLID
 Received Date: 5/23/2013 10:00:00 AM

Analyses	Kesult	KL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	IGE ORGANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/30/2013 1:12:04 AM	7608
Surr: DNOP	92.4	63-147	%REC	1	5/30/2013 1:12:04 AM	7608
EPA METHOD 300.0: ANIONS					Analyst	JRR
Chloride	ND	7.5	mg/Kg	5	5/30/2013 3:08:38 PM	7656
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	DAM
Benzene	ND	0.047	mg/Kg	1	5/31/2013 7:26:46 PM	7604
Toluene	ND	0.047	mg/Kg	1	5/31/2013 7:26:46 PM	7604
Ethylbenzene	ND	0.047	mg/Kg	1	5/31/2013 7:26:46 PM	7604
Xylenes, Total	ND	0.094	mg/Kg	1	5/31/2013 7:26:46 PM	7604
Surr: 1,2-Dichloroethane-d4	86.3	70-130	%REC	1	5/31/2013 7:26:46 PM	7604
Surr: 4-Bromofluorobenzene	87.5	70-130	%REC	1	5/31/2013 7:26:46 PM	7604
Surr: Dibromofluoromethane	88.8	70-130	%REC	1	5/31/2013 7:26:46 PM	7604
Surr: Toluene-d8	97.9	70-130	%REC	1	5/31/2013 7:26:46 PM	7604
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	DAM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/31/2013 7:26:46 PM	7604
Surr: BFB	87.5	70-130	%REC	1	5/31/2013 7:26:46 PM	7604
EPA METHOD 418.1: TPH					Analyst	LRW
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	5/29/2013	7634

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 28 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Date Reported: 6/3/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest GeoscienceClient Sample ID: SB-87 (6')Project: Largo CSCollection Date: 5/21/2013 11:10:00 AMLab ID: 1305967-029Matrix: SOLIDReceived Date: 5/23/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/30/2013 1:33:57 AM	7608
Surr: DNOP	95.2	63-147	%REC	1	5/30/2013 1:33:57 AM	7608
EPA METHOD 300.0: ANIONS					Analys	t: JRR
Chloride	370	30	mg/Kg	20	5/30/2013 4:10:43 PM	7656
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analys	t: DAM
Benzene	ND	0.048	mg/Kg	1	5/31/2013 7:55:00 PM	7604
Toluene	ND	0.048	mg/Kg	1	5/31/2013 7:55:00 PM	7604
Ethylbenzene	ND	0.048	mg/Kg	1	5/31/2013 7:55:00 PM	7604
Xylenes, Total	ND	0.097	mg/Kg	1	5/31/2013 7:55:00 PM	7604
Surr: 1,2-Dichloroethane-d4	87.1	70-130	%REC	1	5/31/2013 7:55:00 PM	7604
Surr: 4-Bromofluorobenzene	80.6	70-130	%REC	1	5/31/2013 7:55:00 PM	7604
Surr: Dibromofluoromethane	90.5	70-130	%REC	1	5/31/2013 7:55:00 PM	7604
Surr: Toluene-d8	101	70-130	%REC	1	5/31/2013 7:55:00 PM	7604
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analys	t: DAM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/31/2013 7:55:00 PM	7604
Surr: BFB	80.6	70-130	%REC	1	5/31/2013 7:55:00 PM	7604
EPA METHOD 418.1: TPH					Analys	t: LRW
Petroleum Hydrocarbons, TR	54	20	mg/Kg	1	5/29/2013	7634

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 29 of 35
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

WO#: 1305967

03-Jun-13

Client: Project:	Southwes Largo CS	t Geoscience
Sample ID	MB-7649	SampType: MBLK TestCode: EPA Method 300.0: Anions
Client ID:	PBS	Batch ID: 7649 RunNo: 10921
Prep Date:	5/28/2013	Analysis Date: 5/28/2013 SeqNo: 308740 Units: mg/Kg
Analyte Chloride		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua ND 1.5
Sample ID	LCS-7649	SampType: LCS TestCode: EPA Method 300.0: Anions
Client ID:	LCSS	Batch ID: 7649 RunNo: 10921
Prep Date:	5/28/2013	Analysis Date: 5/28/2013 SeqNo: 308741 Units: mg/Kg
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua
Chloride		14 1.5 15.00 0 93.1 90 110
Sample ID	MB-7656	SampType: MBLK TestCode: EPA Method 300.0: Anions
Client ID:	PBS	Batch ID: 7656 RunNo: 10956
Prep Date:	5/29/2013	Analysis Date: 5/29/2013 SeqNo: 309751 Units: mg/Kg
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua
Chloride		ND 1.5
Sample ID	LCS-7656	SampType: LCS TestCode: EPA Method 300.0: Anions
Client ID:	LCSS	Batch ID: 7656 RunNo: 10956
Prep Date:	5/29/2013	Analysis Date: 5/29/2013 SeqNo: 309752 Units: mg/Kg
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua
Chloride		14 1.5 15.00 0 96.3 90 110

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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WO#: 1305967

03-Jun-13

Client: Southy	west Geoscience					
Project: Largo	C5					
Sample ID MB-7633	SampType: MBLK	Т	estCode: EPA Metho	d 418.1: TPH		
Client ID: PBS	Batch ID: 7633		RunNo: 10930			
Prep Date: 5/28/2013	Analysis Date: 5/29/20	13	SeqNo: 309076	Units: mg/Kg		
Analyte	Result PQL SPK	value SPK Ref Va	al %REC LowLimi	t HighLimit %RPI	D RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND 20					
Sample ID LCS-7633	SampType: LCS	т	estCode: EPA Metho	d 418.1: TPH		
Client ID: LCSS	Batch ID: 7633		RunNo: 10930			
Prep Date: 5/28/2013	Analysis Date: 5/29/20	13	SeqNo: 309077	Units: mg/Kg		
Analyte	Result PQL SPK	value SPK Ref Va	al %REC LowLimi	t HighLimit %RPI	D RPDLimit	Qual
Petroleum Hydrocarbons, TR	100 20	100.0 0	101 80) 120		
Sample ID LCSD-7633	SampType: LCSD	Т	estCode: EPA Metho	d 418.1: TPH		
Client ID: LCSS02	Batch ID: 7633		RunNo: 10930			
Prep Date: 5/28/2013	Analysis Date: 5/29/20	13	SeqNo: 309079	Units: mg/Kg		
Analyte	Result PQL SPK	value SPK Ref Va	al %REC LowLimi	t HighLimit %RPI	D RPDLimit	Qual
Petroleum Hydrocarbons, TR	99 20	100.0 0	99.2 80) 120 1.4	2 20	
Sample ID MB-7634	SampType: MBLK	Te	estCode: EPA Metho	d 418.1: TPH		
Client ID: PBS	Batch ID: 7634		RunNo: 10930			
Prep Date: 5/28/2013	Analysis Date: 5/29/20	13	SeqNo: 309120	Units: mg/Kg		
Analyte	Result PQL SPK	value SPK Ref Va	al %REC LowLimi	t HighLimit %RPI	D RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND 20					
Sample ID LCS-7634	SampType: LCS	Ti	estCode: EPA Metho	d 418.1: TPH		
Client ID: LCSS	Batch ID: 7634		RunNo: 10930			
Prep Date: 5/28/2013	Analysis Date: 5/29/20	13	SeqNo: 309121	Units: mg/Kg		
Analyte	Result PQL SPK	value SPK Ref Va	I %REC LowLimi	t HighLimit %RPI	D RPDLimit	Qual
Petroleum Hydrocarbons, TR	99 20	100.0 0	99.2 80) 120		2.4
Sample ID LCSD-7634	SampType: LCSD	Tr	estCode: EPA Metho	d 418.1: TPH		
Client ID: LCSS02	Batch ID: 7634		RunNo: 10930			
Prep Date: 5/28/2013	Analysis Date: 5/29/20	13	SeqNo: 309122	Units: mg/Kg		
Analyte	Result PQL SPK	value SPK Ref Va	I %REC LowLimi	t HighLimit %RPI	D RPDLimit	Qual
Petroleum Hydrocarbons, TR	98 20	100.0 0	97.8 80	120 1.4	2 20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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WO#: 1305967

03-Jun-13

Southwest Geoscience **Client: Project:** Largo CS Sample ID MB-7608 SampType: MBLK TestCode: EPA Method 8015D: Diesel Range Organics Client ID: PBS Batch ID: 7608 RunNo: 10884 Prep Date: 5/24/2013 Analysis Date: 5/28/2013 SegNo: 307702 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** LowLimit Qual Diesel Range Organics (DRO) ND 10 Surr: DNOP 10 10.00 101 63 147 Sample ID LCS-7608 SampType: LCS TestCode: EPA Method 8015D: Diesel Range Organics Client ID: LCSS Batch ID: 7608 RunNo: 10884 Prep Date: 5/24/2013 Analysis Date: 5/28/2013 SeqNo: 307703 Units: mg/Kg LowLimit Analyte Result PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 63 10 50.00 0 127 77.1 128 Surr: DNOP 5.4 5.000 107 63 147 Sample ID MB-7601 SampType: MBLK TestCode: EPA Method 8015D: Diesel Range Organics Client ID: PBS Batch ID: 7601 RunNo: 10924 Prep Date: 5/24/2013 Analysis Date: 5/29/2013 SeqNo: 308993 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit Analyte Result PQL HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 Surr: DNOP 10.00 11 105 63 147 Sample ID LCS-7601 SampType: LCS TestCode: EPA Method 8015D: Diesel Range Organics Client ID: LCSS Batch ID: 7601 RunNo: 10924 Prep Date: 5/24/2013 Analysis Date: 5/29/2013 SeqNo: 308994 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 54 10 50.00 0 107 77.1 128 Surr: DNOP 5.000 5.5 110 63 147

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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WO#: 1305967

03-Jun-13

Client: Southwest Geoscience Largo CS **Project:** Sample ID mb-7604 SampType: MBLK TestCode: EPA Method 8260B: Volatiles Short List PBS Client ID: Batch ID: 7604 RunNo: 10920 Prep Date: 5/24/2013 Analysis Date: 5/29/2013 SegNo: 309074 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.050 Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 0.5000 Surr: 1,2-Dichloroethane-d4 0.47 93.2 70 130 Surr: 4-Bromofluorobenzene 0.48 0.5000 96.0 70 130 Surr: Dibromofluoromethane 0.57 0.5000 113 70 130 0.5000 Surr: Toluene-d8 0.43 86.0 70 130 Sample ID Ics-7604 SampType: LCS TestCode: EPA Method 8260B: Volatiles Short List Client ID: LCSS Batch ID: 7604 RunNo: 10920 Prep Date: 5/24/2013 Analysis Date: 5/29/2013 SeqNo: 309075 Units: mg/Kg Result SPK value SPK Ref Val Analyte PQL %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1.0 0.050 1.000 Benzene 0 100 70 130 Toluene 0.90 0.050 1.000 0 90.0 80 120 Surr: 1,2-Dichloroethane-d4 0.45 0.5000 89.3 70 130 Surr: 4-Bromofluorobenzene 0.49 0.5000 97.2 70 130 Surr: Dibromofluoromethane 0.53 0.5000 106 70 130 Surr: Toluene-d8 0.42 0.5000 84.8 70 130 Sample ID Ics-7603 SampType: LCS TestCode: EPA Method 8260B: Volatiles Short List Client ID: LCSS Batch ID: 7603 RunNo: 10920 Prep Date: 5/24/2013 Analysis Date: 5/28/2013 SeqNo: 311871 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1.0 0.050 Benzene 1.000 0 104 70 130 Toluene 0.87 0.050 1.000 0 87.5 80 120 Surr: 1,2-Dichloroethane-d4 0.48 0.5000 95.1 70 130 Surr: 4-Bromofluorobenzene 98.6 0.49 0.5000 70 130 Surr: Dibromofluoromethane 0.57 0.5000 114 70 130 Surr: Toluene-d8 0.41 0.5000 82.6 70 130 SampType: MBLK Sample ID mb-7603 TestCode: EPA Method 8260B: Volatiles Short List Client ID: PBS Batch ID: 7603 RunNo: 10920 Prep Date: 5/24/2013 Analysis Date: 5/28/2013 SeqNo: 311872 Units: mg/Kg Analyte PQL SPK value SPK Ref Val %REC LowLimit %RPD Result HighLimit **RPDLimit** Qual ND 0.050 Benzene Toluene ND 0.050 Ethylbenzene ND 0.050

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2 for VOA and TOC only.

RL Reporting Detection Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

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Client: Southwest Geoscience Project: Largo CS

Sample ID mb-7603	SampType: MBLK Batch ID: 7603			Tes	TestCode: EPA Method 8260B: Volatiles Short List									
Client ID: PBS				RunNo: 10920										
Prep Date: 5/24/2013	Analysis D	Date: 5/	28/2013	S	SeqNo: 3	11872	Units: mg/M	(g						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Kylenes, Total	ND	0.10												
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.9	70	130							
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.7	70	130							
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130							
Surr: Toluene-d8	0.42		0.5000		84.3	70	130							

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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WO#: 1305967

03-Jun-13

WO#: 1305967

03-Jun-13

Client: Southwest Geoscience

Project:	Largo CS	
Sample ID	mb-7603	SampType: MBLK

Sample ID mb-7603	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range										
Client ID: PBS	Batch ID: 7603	RunNo: 10920										
Prep Date: 5/24/2013	Analysis Date: 5/28/2013	SeqNo: 308802 Units: mg/Kg										
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu										
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 490 500.0	97.7 70 130										
Sample ID Ics-7603	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range										
Client ID: LCSS	Batch ID: 7603	RunNo: 10920										
Prep Date: 5/24/2013	Analysis Date: 5/28/2013	SeqNo: 308803 Units: mg/Kg										
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu										
Gasoline Range Organics (GRO)	24 5.0 25.00	0 95.2 74.6 137										
Surr: BFB	440 500.0	88.6 70 130										
Sample ID mb-7604	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range										
Client ID: PBS	Batch ID: 7604	RunNo: 10920										
Prep Date: 5/24/2013	Analysis Date: 5/29/2013	SeqNo: 308872 Units: mg/Kg										
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu										
Gasoline Range Organics (GRO)	ND 5.0											
Surr: BFB	480 500.0	96.0 70 130										
Sample ID Ics-7604	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range										
Client ID: LCSS	Batch ID: 7604	RunNo: 10920										
Prep Date: 5/24/2013	Analysis Date: 5/29/2013	SeqNo: 308873 Units: mg/Kg										
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu										
Gasoline Range Organics (GRO)	23 5.0 25.00	0 90.1 74.6 137										
Surr: BFB	430 500.0	86.3 70 130										

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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HALL Hall Enviro ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-3 Website:	nmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 45-3975 FAX: 505-345-410; www.hallenvironmental.com
Client Name: Southwest Geoscience A Work Order N	lumber: 1305967 RcptNo: 1
Received by/date:	
Logged By: Anne Thome 5/23/2013 10:0	0:00 AM ame the
Completed By: Anne/Thorpe 5/23(2013)	Anne Her
Reviewed By: 657212	
Chain of Custody	4-05/23/13
1. Custody seals intact on sample bottles?	Yesi No 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 🗌 NA 🗌
6. Sample(s) in proper container(s)?	Yes 🗹 No 🗌
7. Sufficient sample volume for indicated test(s)?	Yes 🗹 No 🗌
8. Are samples (except VOA and ONG) properly preserved?	Yes 🗹 No 🗌
9. Was preservative added to bottles?	Yes 🗌 No 🗹 NA 🗌
10.VOA vials have zero headspace?	Yes No No VOA Vials
11. Were any sample containers received broken?	Yes No 🗹 # of preserved
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes V No for pH: (<2 or >12 unless no
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 No NA 🗹

Person Notified: By Whom:	a sina ana ana ana ana ana ana ana ana ana	Date Via: [] eMail	Phone Fax	In Person
Regarding: Client Instructions:			unt ^a r e un e State		م مربع فاست کرد. در در مربع

17. Additional remarks:

1

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

									CHAIN OF CUSTODY RECOF
Song Control Servironment Diffice Locate Project Man Sampler's Nam	e o s c l tral & Hydrogeo tion Aztec ager Sum	Nest LENCE blogic Consultants	Laboratory: Address: Contact: Phone: PO/SO #: Sampler's Sign	Hal IBQ Freeku 410G00 ature	0n 32		ANALYSIS REQUESTED		Lab use only Due Date: Temp. of coolers when received (C''): 1, 1 1 2 3 4 5 Page of 9
roj. No. 04/06	002. PI	Large U	:5		No/Type of	Containers	Rolo		
fatrix Date	Time	C G o r m a Identifying M	Marks of Sample(s)	Start Depth End Depth	VOA A/O	a 250 P/C	SE E	1	Lab Sample ID (Lab Use Only)
5 5/16/13	1030	X MW-	76 (25)			1	xxxx		1305967-001
	1040	I MW-7	16(6')			1	1111		-002
	1100	MW-	76 (18')						
	1230	mu-	7 (2.5)						-004
	12,40	MW-7	7 (6)						-005
	1402	mw-7	7 (31')						
	1510	513-78	(2.5)						-007
	1515	58-78	(6')						-008
5/20/1	3 1000	MW-7	9 (2.5')						-009
5 5	1020	1 MU-7	9 (6')			V	4 × × × ×	-	-010
urn around tim	e A Norma	al 🖸 25% Rush	0 50% Rush C	100% Rush					
elinquished b	y (Signature) y (Signature) y (Signature)	Date: 5/72//3 Date: 5/73//3 Date:	Time: Receiver	ved by: (Signa ved by: (Signa (ed by: (Signa	ature) ature)	5 /2 Dat 05/ Dat	e: Time: N 2/13 1535 p: Time: 2/13 1000 e: Time:	OTES:	
lelinquished b	y (Signature)	Date:	Time: Receiv	ved by: (Signa	ature)	Dat	e: Time:		
latrix N	WW - Wastewater VOA - 40 ml vial	W - Water A/G - Amber	S - Soil SD - So Or Glass 1 Liter	lid L - Liqui 250 ml -	id A - Air - Glass wide	Bag C mouth F	- Charcoal tube SL /O - Plastic or other	- sludge O - Oil	

SOUTHWEST GEOSCIENCE • 2351 W. Northwest Hwy., Suite 3321 • Dallas, Texas 75220 • Office: 214-350-5469 • Fax 214-350-2914

				CHAIN OF CUSTODY RECORD
			Analysis / / /	Lab use only
Couthwest	Laboratory Hall		REQUESTED / / / /	
GEOSCIENCE	Address ABQ			
Environmental & Hydrogeologic Consultants	Aduress.		5////	/ / Temp. of coolers when received (C°):
Artec	Contact		3/1//	
Office Location 7100-2	Dhanad		8 8 1	
Sum map 15	Phone: 041060	02		/ / / Page
Project Manager	PO/SO #:		0/8///	
Fyle Cummers	Sample's container		Q Pa	
Proj. No. DG DO2. Project Name	C.C.	No/Type of Containers	Sel In and Sel	
Matrix Date Time C G m a Identifying	Marks of Sample(s)	VOA A/G 250 P/O	RE	Lab Sample ID (Lab Use Only)
5 5/20/13/215 X MW.	79 (28')	1	XXXXX	1365967-01
1 1400 1 MW.	80 (2.5')		1 1 1 1	-012
1410 MW-	80 (6')			-013
1425 MM-	80 (18')			-014
1540 SB-8	1 (2,5')			-015
1550 SB-8	1 (6)			-010
1600 58-8	2 (2,5')	+		-017
1610 SR-8	2 ((')		┼┟┼╂┼╢╏┟╾┽╶┽╌┤╴	-018
5/21/13 A7 CD MILL	83 (2 5')	+ $+$ $+$ $+$		-019
I ABUS MIN	02 /1/			
Turn around time	0 50% Rush D 100% Rush			-020
Relinquished by (Signature) Date:	Time: Received by: (Sign	nature) Dat	e: Time: NOTES:	
Belinquished by (Signature)	1535 / Marstur	nature) Date	213 1535 e: 1 Time:	
Mastre Waler 5/23/13	45195	05	23/13 1000	
Relinquished by (Signature) Date:	Time: Received by: (Sign	nature) Dat	e: Time:	
Relinquished by (Signature) Date:	Time: Received by: (Sign	nature) Dat	e: Time:	
Matrix -> WW - Wastewater W - Water Container VOA - 40 ml vial A/G - Amber	S - Soil SD - Solid L - Liq / Or Glass 1 Liter 250 m	uid A - Air Bag C I - Glass wide mouth P	- Charcoal tube SL - sludge O - (/O - Plastic or other	

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																	(CHAIN OF CUSTOR	Y RECO
	Ct Manager's Name	uth osc an <u>Azr</u> ger <u>Su</u>	WEIE teologi tec	POLS BAL	Laboratory: Address: Contact: Phone: PO/SO #: Samplers/Sig	H AB 0410 hature	0/1 Q	1				ANRE	IALY IQUI	SIS SIGA	ED (208 0)			Lab use of Due Date Temp. of o when rece 1 2 Page	only v: ived (C°): L 3 4 5 of 5
Proj. N 04/1	06002	ke j	Projec	t Name argo CS				No/Ty	rpe of C	ontain	ers	0	el.	-	N	1/20/	//	/ /	
Matrix	Date	Time	COE	G r a Identifying M	Marks of Sample(s)	Start	End	VOA	A/G 1LL	250 ml	P/O	1	R	X	K	5/////	//	Lab Sample ID (La	b Use Only)
S	1/21/13	0905		X MB-	83 (16')				Wold Carl		7	X	X	V	X		\top	1305915	1-02
T	-	1010		158-8	4 (2,5')						1	1	1	Í	1				-02
		1015		SB-84	(6')							T		H	T				-02
		1030		58-85	(2.5')							1	T	Π	Ħ				-62
	ŀ	1035		SB-85	(6)							T	T		T				-0:
		1045		SB-86	(2,5')								Π	Π	T				-02
		1050		SB-86	(6')														-02
		1100		SB-87	(2,5')				C.		1		Π						-0-
J	-	1110		58-87	(6)						4	4	*	*	V				-0
• •																			
rum an Relinn	uished by	(Signature)	mal	Date:	Time: Rece	ived by	Rush : (Signa	iturje)			Date	: 1	T	Time:	T	NOTES:			
Reling	uished by (Usther uished by ((Signature) Wall (Signature)	ŧr	5/22/13 Date: 5/13/3	1535 Time: Rece 445 Time: Rece	Aust	(Signa	ture)	ten	0	Date	13	34	Time:	5				
		(Cianatura)		Data	Times Dean	had he	· (Signa	ture)			Data			Timo:					

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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 10, 2013

Kyle Summers Southwest Geoscience 606 S. Rio Grande Unit A Aztec, NM 87410 TEL: (903) 821-5603 FAX (214) 350-2914

RE: Largo CS

OrderNo.: 1306171

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/5/2013 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.

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical	Report
Lab Order 1	306171

Date Reported: 6/10/2013

Hall Environmental Analysis Laboratory, Inc.

Analyses		Desult	DI	Qual	Unito	DE Data	Analyzad
Lab ID:	1306171-001	Matrix:	AQUEOU	S	Received	Date: 6/5/2013	10:00:00 AM
Project:	Largo CS				Collection	Date: 6/3/2013	11:45:00 AM
CLIENT:	Southwest Geoscience			0	lient Samp	le ID: MW-77	

Analyses	Result	RL Q)ual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	GSA
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/5/2013 5:58:53 PM	7770
Surr: DNOP	97.2	75.4-146		%REC	1	6/5/2013 5:58:53 PM	7770
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/5/2013 3:26:10 PM	R11112
Surr: BFB	91.3	51.5-151		%REC	1	6/5/2013 3:26:10 PM	R11112
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	6/5/2013 3:26:10 PM	R11112
Benzene	ND	1.0		µg/L	1	6/5/2013 3:26:10 PM	R11112
Toluene	ND	1.0		µg/L	1	6/5/2013 3:26:10 PM	R11112
Ethylbenzene	ND	1.0		µg/L	1	6/5/2013 3:26:10 PM	R11112
Xylenes, Total	ND	2.0		µg/L	1	6/5/2013 3:26:10 PM	R11112
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/5/2013 3:26:10 PM	R11112
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/5/2013 3:26:10 PM	R11112
Surr: 4-Bromofluorobenzene	92.0	69.4-129		%REC	1	6/5/2013 3:26:10 PM	R11112
EPA METHOD 300.0: ANIONS						Analyst:	JRR
Chloride	140	10		mg/L	20	6/5/2013 1:02:52 PM	R11124
SM2540C MOD: TOTAL DISSOLVED S	OLIDS					Analyst:	KS
Total Dissolved Solids	17900	400		mg/L	1	6/6/2013 4:13:00 PM	7776

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

Qualifiers: * Value exceeds Maximum Contaminant Level.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits R

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Not Detected at the Reporting Limit Page 1 of 10 Sample pH greater than 2 for VOA and TOC only.
- Р
- RL Reporting Detection Limit

Date Reported: 6/10/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT:	Southwest Geoscience	Client Sample ID: MW-80									
Project: Largo CS		Collection Date: 6/3/2013 12:45:00 PM									
Lab ID:	1306171-002	Matrix:	AQUEOU	S	Received	Date: 6/5	5/2013 10:00:00 AM				
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch			
EPA MET	THOD 8015D: DIESEL RANGE						Analyst	GSA			
Diesel R	ange Organics (DRO)	ND	1.0		mg/L	1	6/5/2013 6:20:52 PM	7770			
Surr: DNOP		103	75.4-146		%REC	1	6/5/2013 6:20:52 PM	7770			
EPA MET	THOD 8015D: GASOLINE RANG	E					Analyst:	NSB			
Gasoline	e Range Organics (GRO)	ND	0.050		mg/L	1	6/5/2013 4:23:43 PM	R11112			
Surr:	BFB	91.4	51.5-151		%REC	1	6/5/2013 4:23:43 PM	R11112			
EPA MET	THOD 8021B: VOLATILES						Analyst:	NSB			
Methyl te	ert-butyl ether (MTBE)	ND	2.5		µg/L	1	6/5/2013 4:23:43 PM	R11112			
Benzene	3	ND	1.0	1	µg/L	1	6/5/2013 4:23:43 PM	R11112			
Toluene		ND	1.0		µg/L	1	6/5/2013 4:23:43 PM	R11112			
Ethylber	zene	ND	1.0	1	µg/L	1	6/5/2013 4:23:43 PM	R11112			
Xylenes,	Total	ND	2.0		µg/L	1	6/5/2013 4:23:43 PM	R11112			
1,2,4-Tri	methylbenzene	ND	1.0	E.	µg/L	1	6/5/2013 4:23:43 PM	R11112			
1,3,5-Tri	methylbenzene	ND	1.0	1	µg/L	1	6/5/2013 4:23:43 PM	R11112			
Surr:	4-Bromofluorobenzene	92.0	69.4-129		%REC	1	6/5/2013 4:23:43 PM	R11112			
EPA MET	THOD 300.0: ANIONS						Analyst	JRR			
Chloride		82	5.0	1	mg/L	10	6/5/2013 1:15:16 PM	R11124			
SM25400	MOD: TOTAL DISSOLVED SO	LIDS					Analyst	KS			

NESOLVED SOLIDS	VC
Allalyst.	NO
13000 200 * mg/L 1 6/6/2013 4:13:00 PM	7776
13000 200 * mg/L 1 6/6/2013 4:13:0	0 PM

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

- Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 2 of 10
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Lab Order 1306171

Date Reported: 6/10/2013

Hall Environmental Analysis Laboratory, Inc.

1,3,5-Trimethylbenzene

Total Dissolved Solids

Chloride

Surr: 4-Bromofluorobenzene

SM2540C MOD: TOTAL DISSOLVED SOLIDS

EPA METHOD 300.0: ANIONS

CLIENT:	Southwest Geoscience			C	lient Sampl	e ID: M	W-76					
Project:	Largo CS		Collection Date: 6/3/2013 1:25:00 PM									
Lab ID: 1306171-003		Matrix:	AQUEOUS		Received	Date: 6/5	5/2013 10:00:00 AM					
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch				
EPA MET	HOD 8015D: DIESEL RANG	E					Analyst	GSA				
Diesel R	ange Organics (DRO)	ND	1.0		mg/L	1	6/5/2013 6:43:07 PM	7770				
Surr: I	DNOP	103	75.4-146		%REC	1	6/5/2013 6:43:07 PM	7770				
EPA MET	HOD 8015D: GASOLINE RA	NGE					Analyst	: NSB				
Gasoline	Range Organics (GRO)	ND	0.050	1	mg/L	1	6/5/2013 4:53:47 PM	R11112				
Surr: I	BFB	95.2	51.5-151		%REC	1	6/5/2013 4:53:47 PM	R11112				
EPA MET	THOD 8021B: VOLATILES						Analyst	NSB				
Methyl te	ert-butyl ether (MTBE)	ND	2.5	i.	µg/L	1	6/5/2013 4:53:47 PM	R11112				
Benzene	3	ND	1.0		µg/L	1	6/5/2013 4:53:47 PM	R11112				
Toluene		ND	1.0	-	µg/L	1	6/5/2013 4:53:47 PM	R11112				
Ethylben	zene	ND	1.0	6	µg/L	1	6/5/2013 4:53:47 PM	R11112				
Xylenes,	Total	ND	2.0	6	µg/L	1	6/5/2013 4:53:47 PM	R11112				
1,2,4-Tri	methylbenzene	ND	1.0		µg/L	1	6/5/2013 4:53:47 PM	R11112				

1.0

5.0

200

*

69.4-129

µg/L

%REC

mg/L

mg/L

1

1

10

1

6/5/2013 4:53:47 PM

6/5/2013 4:53:47 PM

6/5/2013 2:04:53 PM

6/6/2013 4:13:00 PM

R11112

R11112

R11124

7776

Analyst: JRR

Analyst: KS

ND

90.3

82

14200

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	3 Analyte detected in the associated Method Blank			
	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 Page	Page 3 of 10		
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.			
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit			

Result

4.7

PQL

0.50

WO#: 1306171

Qual

Qual

10-Jun-13

Client: Project:	Southwest C Largo CS	Geoscien	ice							
Sample ID MB		SampT	ype: MI	BLK	Tes	tCode: El	PA Method	300.0: Anions	5	
Client ID: PBV	v	Batch	ID: R1	1124	R	RunNo: 1	1124			
Prep Date:	A	nalysis D	ate: 6	5/2013	S	SeqNo: 3	14690	Units: mg/L		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimi
Chloride		ND	0.50							
Sample ID LCS		SampT	ype: LC	s	Tes	tCode: El	PA Method	300.0: Anions	5	
Client ID: LCS	w	Batch	1D: R1	1124	F	RunNo: 1	1124			
Prep Date:	A	nalysis D	ate: 6	5/2013	S	SeqNo: 3	14691	Units: mg/L		

SPK value SPK Ref Val %REC

0

5.000

LowLimit

90

93.5

HighLimit

110

%RPD

RPDLimit

Qualifiers:

Analyte

Chloride

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Pa	ge	5	of	1	0	
	.					
QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1306171

10-Jun-13

Client: Southwest Geoscience

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Project: Largo	CS														
Sample ID MB-7770	SampType:	IBLK	TestCode: EPA Method 8015D: Diesel Range												
Client ID: PBW	Batch ID: 7	770	F	RunNo: 1	1080										
Prep Date: 6/5/2013	Analysis Date:	6/5/2013	S	SeqNo: 3	14180	Units: mg/L									
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Diesel Range Organics (DRO) Surr: DNOP	ND 1. 0.91	0 1.000		91.1	75.4	146									
Sample ID LCS-7770	SampType: L	.cs	Tes	tCode: El	PA Method	8015D: Diese	el Range								
Client ID: LCSW	Batch ID: 7	770	F	RunNo: 1	1080										
Prep Date: 6/5/2013	Analysis Date:	6/5/2013	S	SeqNo: 3	14181	Units: mg/L									
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Diesel Range Organics (DRO)	5.1 1.	0 5.000	0	103	89.1	151									
Surr: DNOP	0.50	0.5000		100	75.4	146		1000 C							
Sample ID LCSD-7770	SampType: L	CSD	Tes	tCode: E	PA Method	8015D: Diese	el Range	111 12 14 J							
Client ID: LCSS02	Batch ID: 7	770	F	RunNo: 1	1080										
Prep Date: 6/5/2013	Analysis Date:	6/5/2013	S	SeqNo: 3	14182	Units: mg/L									
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Diesel Range Organics (DRO)	5.3 1.	0 5.000	0	107	89.1	151	3.84	20							
Surr: DNOP	0.51	0.5000		103	75.4	146	0	0							

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 6 of 10

QC SUMMARY REPORT

WO#: 1306171

10-Jun-13

Hall Environmental Anal	ysis Laboratory, In	c
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Client: Project:	Southwes Largo CS	t Geoscien	ce								
Sample ID	5ML RB	SampTy	/pe: ME	BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	10	
Client ID:	PBW	Batch	ID: R1	1112	F	RunNo: 1	1112				
Prep Date:		Analysis Da	ate: 6/	5/2013	S	SeqNo: 3	14401	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	ND	0.050								
Surr: BFB		18		20.00		88.5	51.5	151			
Sample ID	2.5UG GRO LCS	SampTy	/pe: LC	s	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	le	
Client ID:	LCSW	Batch	ID: R1	1112	F	RunNo: 1	1112				
Prep Date:		Analysis Da	ate: 6/	5/2013	5	SeqNo: 3	14403	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	0.53	0.050	0.5000	0	106	73.2	124			
Surr: BFB		20		20.00		97.5	51.5	151			
Sample ID	1306171-001AMS	SampTy	pe: MS	S	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	je	
Client ID:	MW-77	Batch	ID: R1	1112	F	RunNo: 1	1112				
Prep Date:		Analysis Da	ate: 6/	/5/2013	5	SeqNo: 3	14418	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	0.51	0.050	0.5000	0	102	65.2	137			
Surr: BFB		20		20.00		99.8	51.5	151			
Sample ID	1306171-001AMS	SampT	ype: MS	SD	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	je	
Client ID:	MW-77	Batch	ID: R1	1112	F	RunNo: 1	1112				
Prep Date:		Analysis Da	ate: 6/	/5/2013	5	SeqNo: 3	314419	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Ran	ge Organics (GRO)	0.49	0.050	0.5000	0	98.5	65.2	137	3.94	20	
Surr: BFB		20		20.00		99.1	51.5	151	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Southwest Geoscience

Project: Largo CS

Sample ID 5ML RB	SampT	ype: ME	BLK	TestCode: EPA Method 8021B: Volatiles										
Client ID: PBW	Batch	n ID: R1	1112	F	RunNo: 1									
Prep Date:	Analysis D	ate: 6/	5/2013	s	SeqNo: 3	14430	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Methyl tert-butyl ether (MTBE)	ND	2.5												
Benzene	ND	1.0												
Toluene	ND	1.0												
Ethylbenzene	ND	1.0												
Xylenes, Total	ND	2.0												
1,2,4-Trimethylbenzene	ND	1.0												
1,3,5-Trimethylbenzene	ND	1.0												
Surr: 4-Bromofluorobenzene	18		20.00		91.9	69.4	129							
Client ID: I CSW	Patel		4442		PunNo: 1	4442	ourie. void							
Client ID: LCSW Prep Date:	Batch Analysis D	n ID: R1 Date: 6/	1112 5/2013	F	RunNo: 1 SeqNo: 3	1112 14431	Units: µg/L							
Client ID: LCSW Prep Date: Analyte	Batch Analysis D Result	n ID: R1 Date: 6/	1112 5/2013 SPK value	F SPK Ref Val	RunNo: 1 SeqNo: 3 %REC	1112 14431 LowLimit	Units: µg/L HighLimit	%RPD	RPDLimit	Qual				
Client ID: LCSW Prep Date: Analyte Methyl tert-butyl ether (MTBE)	Batch Analysis D Result 20	n ID: R1 Date: 6/ PQL 2.5	1112 5/2013 SPK value 20.00	F S SPK Ref Val 0	RunNo: 1 SeqNo: 3 %REC 99.6	1112 14431 LowLimit 76.9	Units: µg/L HighLimit 115	%RPD	RPDLimit	Qual				
Client ID: LCSW Prep Date: Analyte Methyl tert-butyl ether (MTBE) Benzene	Batch Analysis D Result 20 19	n ID: R1 Date: 6 / PQL 2.5 1.0	1112 5/2013 SPK value 20.00 20.00	F SPK Ref Val 0 0	RunNo: 1 SeqNo: 3 %REC 99.6 95.8	1112 14431 LowLimit 76.9 80	Units: µg/L HighLimit 115 120	%RPD	RPDLimit	Qual				
Client ID: LCSW Prep Date: Analyte Methyl tert-butyl ether (MTBE) Benzene Toluene	Batch Analysis D Result 20 19 19	Date: 6/ PQL 2.5 1.0 1.0	1112 5/2013 SPK value 20.00 20.00 20.00	F S SPK Ref Val 0 0 0	RunNo: 1 SeqNo: 3 %REC 99.6 95.8 95.5	1112 14431 LowLimit 76.9 80 80	Units: µg/L HighLimit 115 120 120	%RPD	RPDLimit	Qual				
Client ID: LCSW Prep Date: Analyte Methyl tert-butyl ether (MTBE) Benzene Toluene Ethylbenzene	Batch Analysis D Result 20 19 19 19	PQL 2.5 1.0 1.0 1.0	1112 5/2013 SPK value 20.00 20.00 20.00 20.00	F SPK Ref Val 0 0 0 0	RunNo: 1 SeqNo: 3 %REC 99.6 95.8 95.5 96.6	1112 14431 LowLimit 76.9 80 80 80 80	Units: µg/L HighLimit 115 120 120 120	%RPD	RPDLimit	Qual				
Client ID: LCSW Prep Date: Analyte Methyl tert-butyl ether (MTBE) Benzene Toluene Ethylbenzene Kylenes, Total	Batch Analysis D Result 20 19 19 19 19 58	PQL 2.5 1.0 1.0 1.0 2.0	1112 5/2013 SPK value 20.00 20.00 20.00 20.00 60.00	F SPK Ref Val 0 0 0 0 0 0	RunNo: 1 SeqNo: 3 %REC 99.6 95.8 95.5 96.6 96.4	1112 14431 LowLimit 76.9 80 80 80 80 80 80	Units: µg/L HighLimit 115 120 120 120 120	%RPD	RPDLimit	Qual				
Client ID: LCSW Prep Date: Analyte Methyl tert-butyl ether (MTBE) Benzene Toluene Ethylbenzene Xylenes, Total 1,2,4-Trimethylbenzene	Batch Analysis D Result 20 19 19 19 58 18	PQL 2.5 1.0 1.0 1.0 2.0 1.0 1.0	1112 5/2013 SPK value 20.00 20.00 20.00 20.00 60.00 20.00	F SPK Ref Val 0 0 0 0 0 0 0 0	RunNo: 1 SeqNo: 3 %REC 99.6 95.8 95.5 96.6 96.4 90.5	1112 14431 LowLimit 76.9 80 80 80 80 80 80 80 80	Units: µg/L HighLimit 115 120 120 120 120 120 120	%RPD	RPDLimit	Qual				
Client ID: LCSW Prep Date: Analyte Methyl tert-butyl ether (MTBE) Benzene Toluene Ethylbenzene Xylenes, Total 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene	Batch Analysis D Result 20 19 19 19 58 18 18 19	PQL 2.5 1.0 1.0 1.0 2.0 1.0 1.0 1.0 1.0	1112 5/2013 20.00 20.00 20.00 20.00 60.00 20.00 20.00 20.00	F SPK Ref Val 0 0 0 0 0 0 0 0 0 0	RunNo: 1 SeqNo: 3 %REC 99.6 95.8 95.5 96.6 96.4 90.5 97.5	1112 14431 16.9 76.9 80 80 80 80 80 80 80 80 80 80 80	Units: µg/L HighLimit 115 120 120 120 120 120 120 120	%RPD	RPDLimit	Qual				

Client ID: MW-80	Batc	h ID: R1	1112	F	RunNo: 1	1112				
Prep Date:	Analysis [Date: 6/	5/2013	S	SeqNo: 3	14447	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19	2.5	20.00	0	97.2	65.6	125			
Benzene	19	1.0	20.00	0	92.7	80	120			
Toluene	19	1.0	20.00	0	92.6	80	120			
Ethylbenzene	19	1.0	20.00	0	92.8	80	120			
Xylenes, Total	57	2.0	60.00	0	94.2	80	120			
1,2,4-Trimethylbenzene	18	1.0	20.00	0	89.9	74	128			
1,3,5-Trimethylbenzene	19	1.0	20.00	0 94.0 75.5		130				
Surr: 4-Bromofluorobenzene	19		20.00		69.4	129				

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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WO#: 1306171

10-Jun-13

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client: Southwest Geoscience

Project:

Largo CS

Sample ID 1306171-002AMSD	SampT	ype: MS	SD	TestCode: EPA Method 8021B: Volatiles											
Client ID: MW-80	Batch	n ID: R1	1112	F	RunNo: 1										
Prep Date:	Analysis D)ate: 6/	5/2013	5	SeqNo: 3	14449	Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Methyl tert-butyl ether (MTBE)	19	2.5	20.00	0	96.5	65.6	125	0.692	20						
Benzene	18	1.0	20.00	0	89.6	80	120	3.49	20						
Toluene	18	1.0	20.00	0	89.0	80	120	3.97	20						
Ethylbenzene	18	1.0	20.00	0	90.0	80	120	3.05	20						
Xylenes, Total	55	2.0	60.00	0	91.3	80	120	3.19	20						
1,2,4-Trimethylbenzene	17	1.0	20.00	0	87.4	74	128	2.87	20						
1,3,5-Trimethylbenzene	18	1.0	20.00	0	91.1	75.5	130	3.16	20						
Surr: 4-Bromofluorobenzene	19		20.00		94.5	69.4	129	0	0						

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
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- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
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- P Sample pH greater than 2 for VOA and TOC only.
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WO#: 1306171

10-Jun-13

QC SUMMARY REPORT

WO#: 1306171

10-Jun-13

Hall Environment	tal Analysis	s Laborat	tory, Inc.
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Client: Southwest Geoscience Project: Largo CS

Sample ID MB-7776	SampType: MBLK	TestCode: SM2540C M	OD: Total Dissolved Solids
Client ID: PBW	Batch ID: 7776	RunNo: 11140	
Prep Date: 6/5/2013	Analysis Date: 6/6/2013	SeqNo: 315014	Units: mg/L
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qua
Total Dissolved Solids	ND 20.0		
Sample ID LCS-7776	SampType: LCS	TestCode: SM2540C M	OD: Total Dissolved Solids
Client ID: LCSW	Batch ID: 7776	RunNo: 11140	
Prep Date: 6/5/2013	Analysis Date: 6/6/2013	SeqNo: 315015	Units: mg/L
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qua
Fotal Dissolved Solids	1020 20.0 1000	0 102 80	120

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
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- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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ANALYSIS	Albu TEL: 505-345-3975 Website: www.ha	iquerqui FAX: 5 Ilenviro	e, NM 8 05-345- nmental	410; .com	m	Die Log-In Check List
Client Name: Southwest Geoscience Wo	rk Order Number:	13061	71			RcptNo: 1
teceived by/date: MG OCell	25/13				_	
ogged By: Lindsay Mangin 6/5/20	013 10:00:00 AM			Aught	P	
Completed By: Lindsay Mangin 6/5/20	013 10:17:09 AM			Aught	0	
Reviewed By: 06/0	ostas					
hain of Custody				÷		
1. Custody seals intact on sample bottles?		Yes		No D		Not Present
2. Is Chain of Custody complete?		Yes	\checkmark	No [Not Present
3. How was the sample delivered?		Cour	ier			
<u>.og In</u>						
4. Was an attempt made to cool the samples?		Yes		No		
5. Were all samples received at a temperature of >0	° C to 6.0°C	Yes	V	No [
6. Sample(s) in proper container(s)?		Yes		No		
7. Sufficient sample volume for indicated test(s)?		Yes	\checkmark	No [
8. Are samples (except VOA and ONG) properly pres	served?	Yes		No [
9. Was preservative added to bottles?		Yes		No		NA 🗌
0.VOA vials have zero headspace?		Yes	~	No [No VOA Vials
1. Were any sample containers received broken?		Yes		No	2	# of preserved
12. Does paperwork match bottle labels? (Note discremancies on chain of custody)		Yes		No [for pH: (<2 or >12 unless note
3 Are matrices correctly identified on Chain of Custo	dy?	Yes		No [Adjusted?
4. Is it clear what analyses were requested?		Yes	\checkmark	No [וכ	
5. Were all holding times able to be met?		Yes	\checkmark	No [Checked by:
				*		
pecial Handling (if applicable)						
16. Was client notified of all discrepancies with this or	der?	Yes		No [NA 🗹
Person Notified:	Date:		-			
By Whom:	Via:	eMa	ail 🗌	Phone I	Fax	In Person
Regarding:		-			-	1
Client Instructions:	A CALL COLORIS CONTRACTOR STATE	and for a set of the	17186 875441 Y 3	are the second all more	dia:118714	all and an english of the officiations. The solid of a faceboard
17 Additional remarks:	 A. C. Martin and Rev. Phys. Rev. Lett. 10, 274 (198). 	2111 Mar 1	an na 1919 (1919)	Real Processing Street and Stre	11000	and at a second second second second
18. <u>Cooler Information</u> Cooler No Temp °C Condition Seal Intr	act Seal No	Seal D	ate	Signed B	y.	

																			Ŧ			CHAIN O	F CUSTODY RECOR
C En Diffic Proje	e Loc	DI GE nenta catio	uth os 1 & Hydro n Az ger	IV CI Digeolo Zete Sul		Cor	St CE Isultants	Labo Addu Pho PO/: Sam	tact: <u>A</u> , ne: SO #: <u>C</u>	H. BG Fa	06	1	l 2			R	ialy all	SIS ESTE JOS CAN	C				Lab use only Due Date: Temp. of coolers /. () when received (C°): 1 2 3 4 5 Page of
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latrix	Da	ite	Time	CoEr			Identifyin	g Marks of	Sample(s)	Start	End	VOA	A/G 1 LL.	250 ml	P/0	4	A	N	2	///		/ / Li	ab Sample ID (Lab Use Only)
V	6/3	13	1145	-	>	3	ml	1-7	7			5			1	X	x	X	X			1204	171-001
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telin	ath	dby	Signature	e)		4	4/13 Date:	1730 Time	Recei	ived by	UT.	ature)		K	Dat	05/ e: /	31	Time:	9	on	H.S		
Relin	uishe	d by	(Signatur	e)	_	D)ate:	Time	Recei	ived by	: (Sign	ature)		-	Dat	e:	1	ime:					
Aatrix	nor	W	W - Waster	vater	-	W A	V - Water	S - So	il SD-Si	olid	L - Liqu	id A	- Air B	Bag	C	- Cha	rcoal	tube	SL-s	ludge C	- Oil		

SOUTHWEST GEOSCIENCE • 2351 W. Northwest Hwy., Suite 3321 • Dallas, Texas 75220 • Office: 214-350-5469 • Fax 214-350-2914