

Rena Seay

From: "Rena Seay" <seay04@leaco.net>
To: "Rickey Smith" <rickeylynnsmith@gmail.com>
Sent: Wednesday, March 08, 2017 9:49 AM
Attach: Inv_103852_1702B58_Final_v3.pdf; Rpt_1702B58_Final_v2.pdf
Subject: Samnal Lease
March 6, 2017

INFORMATION ONLY

Smith & Marrs
ATTN: Jason Smithy
Box 516
Memphis, TX 79245

RE: Samnal Lease
Remediation

Mr. Smith:

The sample results for the Samnal Lease remediation are attached.

The cleanup standards for remediation is based on depth of groundwater. According to OCD guidelines, your site has a ranking criteria of "O". Groundwater in this area is in excess of 100 ft, no water wells or surface water located within 1000 ft.

Cleanup levels are 5000 ppm Total Hydrocarbon (oil) 50 ppm BTEX and 1000 ppm Chloride (salt). The site has not been delineated, additional sampling should be done to meet cleanup standards for Chloride only, BTEX and TPH look OK.

I would suggest taking additional samples at a depth of six (6) ft. at each site 1-10 and we will only test for Chloride.

Please call if you have any questions or need anything further.

Sincerely,

Eddie W. Seay
Eddie Seay Consulting
601 W. Illinois
Hobbs, NM 88242
575-392-2236
seay04@leaco.net

3/8/2017



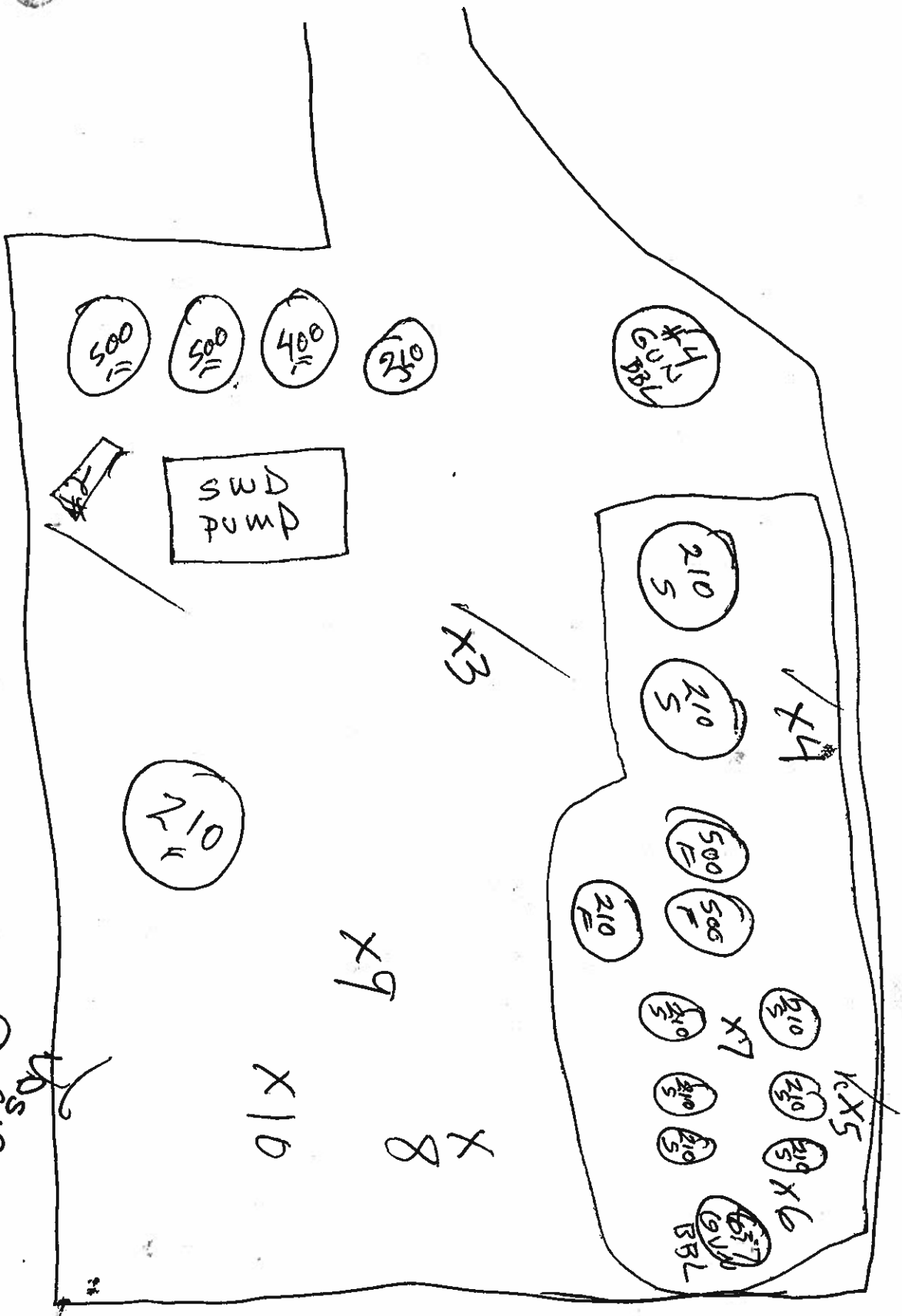








1/15/20





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

March 06, 2017

Jason Smith
Smith & Marrs
Box 516
Memphis, TX 79245
TEL: (432) 940-1900
FAX

RE: Samnal Lease

OrderNo.: 1702B58

Dear Jason Smith:

Hall Environmental Analysis Laboratory received 30 sample(s) on 2/24/2017 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109



Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-1-1

Project: Samnal Lease

Collection Date: 2/22/2017 6:30:00 AM

Lab ID: 1702B58-001

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	ND	8.2		mg/Kg	1	3/1/2017 10:13:43 AM
Surr: DNOP	97.2	70-130		%Rec	1	3/1/2017 10:13:43 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/1/2017 1:29:36 PM
Surr: BFB	83.8	54-150		%Rec	1	3/1/2017 1:29:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/1/2017 1:29:36 PM
Toluene	ND	0.049		mg/Kg	1	3/1/2017 1:29:36 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/1/2017 1:29:36 PM
Xylenes, Total	ND	0.099		mg/Kg	1	3/1/2017 1:29:36 PM
Surr: 4-Bromofluorobenzene	89.6	66.6-132		%Rec	1	3/1/2017 1:29:36 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	700	30		mg/Kg	20	3/1/2017 3:08:39 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
 Project: Samnal Lease
 Lab ID: 1702B58-002

Matrix: SOIL

Client Sample ID: S-1-2
 Collection Date: 2/22/2017 6:40:00 AM
 Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/1/2017 11:28:40 AM
Surr: DNOP	94.7	70-130		%Rec	1	3/1/2017 11:28:40 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/1/2017 2:49:00 PM
Surr: BFB	83.5	54-150		%Rec	1	3/1/2017 2:49:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/1/2017 2:49:00 PM
Toluene	ND	0.047		mg/Kg	1	3/1/2017 2:49:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/1/2017 2:49:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	3/1/2017 2:49:00 PM
Surr: 4-Bromofluorobenzene	91.1	66.6-132		%Rec	1	3/1/2017 2:49:00 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1000	75		mg/Kg	50	3/2/2017 11:57:20 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-1-3

Project: Samnal Lease

Collection Date: 2/22/2017 6:55:00 AM

Lab ID: 1702B58-003

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/1/2017 11:50:57 AM
Surr: DNOP	96.2	70-130		%Rec	1	3/1/2017 11:50:57 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/1/2017 6:47:02 PM
Surr: BFB	88.2	54-150		%Rec	1	3/1/2017 6:47:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/1/2017 6:47:02 PM
Toluene	ND	0.050		mg/Kg	1	3/1/2017 6:47:02 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/1/2017 6:47:02 PM
Xylenes, Total	ND	0.10		mg/Kg	1	3/1/2017 6:47:02 PM
Surr: 4-Bromofluorobenzene	93.4	66.6-132		%Rec	1	3/1/2017 6:47:02 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1400	75		mg/Kg	50	3/2/2017 12:09:45 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
 Project: Samnal Lease
 Lab ID: 1702B58-004

Matrix: SOIL

Client Sample ID: S-2-1
 Collection Date: 2/22/2017 7:15:00 AM
 Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	90	9.2		mg/Kg	1	3/1/2017 5:32:36 PM
Surr: DNOP	102	70-130		%Rec	1	3/1/2017 5:32:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/1/2017 7:13:20 PM
Surr: BFB	82.8	54-150		%Rec	1	3/1/2017 7:13:20 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/1/2017 7:13:20 PM
Toluene	ND	0.046		mg/Kg	1	3/1/2017 7:13:20 PM
Ethylbenzene	ND	0.046		mg/Kg	1	3/1/2017 7:13:20 PM
Xylenes, Total	ND	0.092		mg/Kg	1	3/1/2017 7:13:20 PM
Surr: 4-Bromofluorobenzene	90.4	66.6-132		%Rec	1	3/1/2017 7:13:20 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	2200	75		mg/Kg	50	3/2/2017 12:22:09 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-2-2

Project: Samnal Lease

Collection Date: 2/22/2017 7:30:00 AM

Lab ID: 1702B58-005

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	38	9.4		mg/Kg	1	3/1/2017 6:21:04 PM
Surr: DNOP	99.3	70-130		%Rec	1	3/1/2017 6:21:04 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/1/2017 7:39:41 PM
Surr: BFB	75.7	54-150		%Rec	1	3/1/2017 7:39:41 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/1/2017 7:39:41 PM
Toluene	ND	0.049		mg/Kg	1	3/1/2017 7:39:41 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/1/2017 7:39:41 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/1/2017 7:39:41 PM
Surr: 4-Bromofluorobenzene	82.5	66.6-132		%Rec	1	3/1/2017 7:39:41 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	2000	75		mg/Kg	50	3/2/2017 12:34:33 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-2-3

Project: Samnal Lease

Collection Date: 2/22/2017 7:50:00 AM

Lab ID: 1702B58-006

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	310	9.8		mg/Kg	1	3/1/2017 7:08:14 PM
Surr: DNOP	96.3	70-130		%Rec	1	3/1/2017 7:08:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/1/2017 8:06:07 PM
Surr: BFB	72.8	54-150		%Rec	1	3/1/2017 8:06:07 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/1/2017 8:06:07 PM
Toluene	ND	0.050		mg/Kg	1	3/1/2017 8:06:07 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/1/2017 8:06:07 PM
Xylenes, Total	ND	0.066		mg/Kg	1	3/1/2017 8:06:07 PM
Surr: 4-Bromofluorobenzene	78.1	66.6-132		%Rec	1	3/1/2017 8:06:07 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1800	75		mg/Kg	50	3/2/2017 1:11:47 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-3-1

Project: Samnal Lease

Collection Date: 2/22/2017 8:10:00 AM

Lab ID: 1702B58-007

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	150	9.6		mg/Kg	1	3/1/2017 7:57:10 PM
Surr: DNOP	94.2	70-130		%Rec	1	3/1/2017 7:57:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/1/2017 8:32:21 PM
Surr: BFB	71.7	54-150		%Rec	1	3/1/2017 8:32:21 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/1/2017 8:32:21 PM
Toluene	ND	0.047		mg/Kg	1	3/1/2017 8:32:21 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/1/2017 8:32:21 PM
Xylenes, Total	ND	0.064		mg/Kg	1	3/1/2017 8:32:21 PM
Surr: 4-Bromofluorobenzene	77.2	66.6-132		%Rec	1	3/1/2017 8:32:21 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	13000	750		mg/Kg	500	3/2/2017 1:24:11 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-3-2

Project: Samnal Lease

Collection Date: 2/22/2017 8:30:00 AM

Lab ID: 1702B58-008

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	150	9.9		mg/Kg	1	3/1/2017 8:45:01 PM
Surr: DNOP	92.3	70-130		%Rec	1	3/1/2017 8:45:01 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/1/2017 8:58:39 PM
Surr: BFB	70.8	54-150		%Rec	1	3/1/2017 8:58:39 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/1/2017 8:58:39 PM
Toluene	ND	0.047		mg/Kg	1	3/1/2017 8:58:39 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/1/2017 8:58:39 PM
Xylenes, Total	ND	0.094		mg/Kg	1	3/1/2017 8:58:39 PM
Surr: 4-Bromofluorobenzene	76.6	66.6-132		%Rec	1	3/1/2017 8:58:39 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	12000	750		mg/Kg	500	3/2/2017 1:38:36 PM

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

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

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1702B58

Date Reported: 3/6/2017

CLIENT: Smith & Marrs**Client Sample ID:** S-3-3**Project:** Samnal Lease**Collection Date:** 2/22/2017 8:50:00 AM**Lab ID:** 1702B58-009**Matrix:** SOIL**Received Date:** 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	51	9.6		mg/Kg	1	3/1/2017 9:32:47 PM
Surr: DNOP	91.6	70-130		%Rec	1	3/1/2017 9:32:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/1/2017 9:24:52 PM
Surr: BFB	66.9	54-150		%Rec	1	3/1/2017 9:24:52 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/1/2017 9:24:52 PM
Toluene	ND	0.049		mg/Kg	1	3/1/2017 9:24:52 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/1/2017 9:24:52 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/1/2017 9:24:52 PM
Surr: 4-Bromofluorobenzene	71.4	66.6-132		%Rec	1	3/1/2017 9:24:52 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	8300	300		mg/Kg	200	3/2/2017 1:49:01 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Project: Samnal Lease

Lab ID: 1702B58-010

Matrix: SOIL

Client Sample ID: S-4-1

Collection Date: 2/22/2017 9:05:00 AM

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	2100	99		mg/Kg	10	3/1/2017 2:40:54 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 2:40:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	23	9.3		mg/Kg	2	3/1/2017 9:58:31 AM
Surr: BFB	166	54-150	S	%Rec	2	3/1/2017 9:58:31 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.047		mg/Kg	2	3/1/2017 9:58:31 AM
Toluene	0.46	0.093		mg/Kg	2	3/1/2017 9:58:31 AM
Ethylbenzene	0.44	0.093		mg/Kg	2	3/1/2017 9:58:31 AM
Xylenes, Total	1.4	0.19		mg/Kg	2	3/1/2017 9:58:31 AM
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	2	3/1/2017 9:58:31 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	430	30		mg/Kg	20	3/1/2017 7:04:26 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
 Project: Samnal Lease
 Lab ID: 1702B58-011

Matrix: SOIL

Client Sample ID: S-4-2
 Collection Date: 2/22/2017 9:20:00 AM
 Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	960	98		mg/Kg	10	3/1/2017 3:05:19 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 3:05:19 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/1/2017 5:54:19 PM
Surr: BFB	114	54-150		%Rec	1	3/1/2017 5:54:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/1/2017 5:54:19 PM
Toluene	ND	0.048		mg/Kg	1	3/1/2017 5:54:19 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/1/2017 5:54:19 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/1/2017 5:54:19 PM
Surr: 4-Bromofluorobenzene	101	66.6-132		%Rec	1	3/1/2017 5:54:19 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	480	30		mg/Kg	20	3/1/2017 7:16:51 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1702B58
Date Reported: 3/6/2017

CLIENT: Smith & Marrs

Client Sample ID: S-4-3

Project: Samnal Lease

Collection Date: 2/22/2017 9:40:00 AM

Lab ID: 1702B58-012

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	1400	98		mg/Kg	10	3/1/2017 3:29:36 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 3:29:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	20	9.9		mg/Kg	2	3/1/2017 10:51:26 AM
Surr: BFB	202	54-150	S	%Rec	2	3/1/2017 10:51:26 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.049		mg/Kg	2	3/1/2017 10:51:26 AM
Toluene	ND	0.099		mg/Kg	2	3/1/2017 10:51:26 AM
Ethylbenzene	ND	0.099		mg/Kg	2	3/1/2017 10:51:26 AM
Xylenes, Total	ND	0.20		mg/Kg	2	3/1/2017 10:51:26 AM
Surr: 4-Bromofluorobenzene	95.9	66.6-132		%Rec	2	3/1/2017 10:51:26 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1300	75		mg/Kg	50	3/2/2017 2:01:26 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-5-1

Project: Samnal Lease

Collection Date: 2/22/2017 10:00:00 AM

Lab ID: 1702B58-013

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	3300	93		mg/Kg	10	3/1/2017 4:19:28 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 4:19:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	9.8		mg/Kg	2	3/1/2017 11:17:58 AM
Surr: BFB	124	54-150		%Rec	2	3/1/2017 11:17:58 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.049		mg/Kg	2	3/1/2017 11:17:58 AM
Toluene	ND	0.098		mg/Kg	2	3/1/2017 11:17:58 AM
Ethylbenzene	ND	0.098		mg/Kg	2	3/1/2017 11:17:58 AM
Xylenes, Total	ND	0.20		mg/Kg	2	3/1/2017 11:17:58 AM
Surr: 4-Bromofluorobenzene	95.2	66.6-132		%Rec	2	3/1/2017 11:17:58 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	8400	300		mg/Kg	200	3/2/2017 2:13:50 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-5-2

Project: Samnal Lease

Collection Date: 2/22/2017 10:25:00 AM

Lab ID: 1702B58-014

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	5300	98		mg/Kg	10	3/1/2017 4:43:55 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 4:43:55 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	9.4		mg/Kg	2	3/1/2017 11:44:11 AM
Surr: BFB	111	54-150		%Rec	2	3/1/2017 11:44:11 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.047		mg/Kg	2	3/1/2017 11:44:11 AM
Toluene	ND	0.084		mg/Kg	2	3/1/2017 11:44:11 AM
Ethylbenzene	ND	0.084		mg/Kg	2	3/1/2017 11:44:11 AM
Xylenes, Total	ND	0.19		mg/Kg	2	3/1/2017 11:44:11 AM
Surr: 4-Bromofluorobenzene	94.4	66.6-132		%Rec	2	3/1/2017 11:44:11 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	6900	300		mg/Kg	200	3/2/2017 2:26:15 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
 Project: Samnal Lease
 Lab ID: 1702B58-015

Matrix: SOIL

Client Sample ID: S-5-3
 Collection Date: 2/22/2017 10:55:00 AM
 Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	4000	94		mg/Kg	10	3/1/2017 5:08:15 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 5:08:15 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	9.9		mg/Kg	2	3/1/2017 6:20:43 PM
Surr: BFB	104	54-150		%Rec	2	3/1/2017 6:20:43 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.050		mg/Kg	2	3/1/2017 6:20:43 PM
Toluene	ND	0.099		mg/Kg	2	3/1/2017 6:20:43 PM
Ethylbenzene	ND	0.099		mg/Kg	2	3/1/2017 6:20:43 PM
Xylenes, Total	ND	0.20		mg/Kg	2	3/1/2017 6:20:43 PM
Surr: 4-Bromofluorobenzene	96.4	66.6-132		%Rec	2	3/1/2017 6:20:43 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	4700	300		mg/Kg	200	3/2/2017 2:38:40 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-6-1

Project: Samnal Lease

Collection Date: 2/22/2017 11:15:00 AM

Lab ID: 1702B58-016

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	2500	91		mg/Kg	10	3/1/2017 5:08:24 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 5:08:24 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	60	9.2		mg/Kg	2	3/1/2017 12:38:56 PM
Surr: BFB	330	54-150	S	%Rec	2	3/1/2017 12:38:56 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.046		mg/Kg	2	3/1/2017 12:38:56 PM
Toluene	0.37	0.092		mg/Kg	2	3/1/2017 12:38:56 PM
Ethylbenzene	0.38	0.092		mg/Kg	2	3/1/2017 12:38:56 PM
Xylenes, Total	2.6	0.18		mg/Kg	2	3/1/2017 12:38:56 PM
Surr: 4-Bromofluorobenzene	105	66.6-132		%Rec	2	3/1/2017 12:38:56 PM
EPA METHOD 309.0: ANIONS						Analyst: LGT
Chloride	2500	75		mg/Kg	50	3/2/2017 2:51:05 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-6-2

Project: Samnal Lease

Collection Date: 2/22/2017 11:35:00 AM

Lab ID: 1702B58-017

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	2400	95		mg/Kg	10	3/1/2017 5:29:54 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 5:29:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	25	9.6		mg/Kg	2	3/1/2017 12:05:00 PM
Surr: BFB	164	54-150	S	%Rec	2	3/1/2017 12:05:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.048		mg/Kg	2	3/1/2017 12:05:00 PM
Toluene	ND	0.096		mg/Kg	2	3/1/2017 12:05:00 PM
Ethylbenzene	ND	0.096		mg/Kg	2	3/1/2017 12:05:00 PM
Xylenes, Total	0.49	0.19		mg/Kg	2	3/1/2017 12:05:00 PM
Surr: 4-Bromofluorobenzene	119	66.6-132		%Rec	2	3/1/2017 12:05:00 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	2300	150		mg/Kg	100	3/2/2017 3:03:29 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs **Client Sample ID:** S-6-3
Project: Samnal Lease **Collection Date:** 2/22/2017 11:50:00 AM
Lab ID: 1702B58-018 **Matrix:** SOIL **Received Date:** 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	20000	480		mg/Kg	50	3/1/2017 5:51:23 PM
Surr: DNOP	0	70-130	S	%Rec	50	3/1/2017 5:51:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	440	24		mg/Kg	5	3/1/2017 12:28:32 PM
Surr: BFB	489	54-150	S	%Rec	5	3/1/2017 12:28:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	3/1/2017 12:28:32 PM
Toluene	8.0	0.24		mg/Kg	5	3/1/2017 12:28:32 PM
Ethylbenzene	5.5	0.24		mg/Kg	5	3/1/2017 12:28:32 PM
Xylenes, Total	21	0.48		mg/Kg	5	3/1/2017 12:28:32 PM
Surr: 4-Bromofluorobenzene	153	66.6-132	S	%Rec	5	3/1/2017 12:28:32 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1000	30		mg/Kg	20	3/1/2017 9:08:33 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-7-1

Project: Samnal Lease

Collection Date: 2/22/2017 12:15:00 PM

Lab ID: 1702B58-019

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	7900	450		mg/Kg	50	3/1/2017 6:12:48 PM
Surr: DNOP	0	70-130	S	%Rec	50	3/1/2017 6:12:48 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	83	23		mg/Kg	5	3/1/2017 1:03:13 PM
Surr: BFB	214	54-150	S	%Rec	5	3/1/2017 1:03:13 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	0.33	0.12		mg/Kg	5	3/1/2017 1:03:13 PM
Toluene	ND	0.23		mg/Kg	5	3/1/2017 1:03:13 PM
Ethylbenzene	0.41	0.23		mg/Kg	5	3/1/2017 1:03:13 PM
Xylenes, Total	0.87	0.46		mg/Kg	5	3/1/2017 1:03:13 PM
Surr: 4-Bromofluorobenzene	106	66.6-132		%Rec	5	3/1/2017 1:03:13 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	2400	75		mg/Kg	50	3/2/2017 3:40:43 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-7-2

Project: Samnal Lease

Collection Date: 2/22/2017 2:00:00 PM

Lab ID: 1702B58-020

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	3100	97		mg/Kg	10	3/1/2017 6:34:13 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 6:34:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	64	4.8		mg/Kg	1	3/1/2017 9:51:08 PM
Surr: BFB	532	54-150	S	%Rec	1	3/1/2017 9:51:08 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/1/2017 9:51:08 PM
Toluene	ND	0.048		mg/Kg	1	3/1/2017 9:51:08 PM
Ethylbenzene	0.25	0.048		mg/Kg	1	3/1/2017 9:51:08 PM
Xylenes, Total	0.30	0.097		mg/Kg	1	3/1/2017 9:51:08 PM
Surr: 4-Bromofluorobenzene	85.8	66.6-132		%Rec	1	3/1/2017 9:51:08 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1200	75		mg/Kg	50	3/2/2017 3:53:08 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
 Project: Samnal Lease
 Lab ID: 1702B58-021

Matrix: SOIL

Client Sample ID: S-7-3
 Collection Date: 2/22/2017 2:20:00 PM
 Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	3300	460		mg/Kg	50	3/1/2017 6:55:36 PM
Surr: DNOP	0	70-130	S	%Rec	50	3/1/2017 6:55:36 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1500	75		mg/Kg	50	3/2/2017 4:05:33 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	3/2/2017 12:26:38 AM
Toluene	0.048	0.047		mg/Kg	1	3/2/2017 12:26:38 AM
Ethylbenzene	0.24	0.047		mg/Kg	1	3/2/2017 12:26:38 AM
Xylenes, Total	0.74	0.093		mg/Kg	1	3/2/2017 12:26:38 AM
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	3/2/2017 12:26:38 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	3/2/2017 12:26:38 AM
Surr: Dibromofluoromethane	100	70-130		%Rec	1	3/2/2017 12:26:38 AM
Surr: Toluene-d8	101	70-130		%Rec	1	3/2/2017 12:26:38 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	97	4.7		mg/Kg	1	3/2/2017 12:26:38 AM
Surr: BFB	115	70-130		%Rec	1	3/2/2017 12:26:38 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-8-1

Project: Samnal Lease

Collection Date: 2/22/2017 2:45:00 PM

Lab ID: 1702B58-022

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	1300	94		mg/Kg	10	3/1/2017 7:16:55 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 7:16:55 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	15000	750		mg/Kg	500	3/2/2017 4:17:58 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	3/2/2017 1:51:57 AM
Toluene	ND	0.050		mg/Kg	1	3/2/2017 1:51:57 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2017 1:51:57 AM
Xylenes, Total	ND	0.10		mg/Kg	1	3/2/2017 1:51:57 AM
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	3/2/2017 1:51:57 AM
Surr: 4-Bromofluorobenzene	98.9	70-130		%Rec	1	3/2/2017 1:51:57 AM
Surr: Dibromofluoromethane	105	70-130		%Rec	1	3/2/2017 1:51:57 AM
Surr: Toluene-d8	102	70-130		%Rec	1	3/2/2017 1:51:57 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2017 1:51:57 AM
Surr: BFB	99.0	70-130		%Rec	1	3/2/2017 1:51:57 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1702B58
Date Reported: 3/6/2017

CLIENT: Smith & Marrs

Client Sample ID: S-8-2

Project: Samnal Lease

Collection Date: 2/22/2017 3:15:00 PM

Lab ID: 1702B58-023

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	260	100		mg/Kg	10	3/1/2017 7:38:10 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 7:38:10 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	12000	750		mg/Kg	500	3/2/2017 4:30:22 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	3/2/2017 3:17:21 AM
Toluene	ND	0.049		mg/Kg	1	3/2/2017 3:17:21 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 3:17:21 AM
Xylenes, Total	ND	0.098		mg/Kg	1	3/2/2017 3:17:21 AM
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%Rec	1	3/2/2017 3:17:21 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	3/2/2017 3:17:21 AM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	3/2/2017 3:17:21 AM
Surr: Toluene-d8	99.5	70-130		%Rec	1	3/2/2017 3:17:21 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 3:17:21 AM
Surr: BFB	95.3	70-130		%Rec	1	3/2/2017 3:17:21 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-8-3

Project: Samnal Lease

Collection Date: 2/22/2017 3:40:00 PM

Lab ID: 1702B58-024

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	320	94		mg/Kg	10	3/1/2017 7:59:35 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 7:59:35 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	7800	300		mg/Kg	200	3/2/2017 4:42:46 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	3/2/2017 3:48:12 AM
Toluene	ND	0.050		mg/Kg	1	3/2/2017 3:48:12 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2017 3:48:12 AM
Xylenes, Total	ND	0.10		mg/Kg	1	3/2/2017 3:48:12 AM
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	3/2/2017 3:48:12 AM
Surr: 4-Bromofluorobenzene	91.0	70-130		%Rec	1	3/2/2017 3:48:12 AM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	3/2/2017 3:48:12 AM
Surr: Toluene-d8	101	70-130		%Rec	1	3/2/2017 3:48:12 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2017 3:48:12 AM
Surr: BFB	92.3	70-130		%Rec	1	3/2/2017 3:48:12 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-9-1

Project: Samnal Lease

Collection Date: 2/22/2017 4:10:00 PM

Lab ID: 1702B58-025

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	51	9.4		mg/Kg	1	3/3/2017 9:20:13 AM
Surr: DNOP	114	70-130		%Rec	1	3/3/2017 9:20:13 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	15000	750		mg/Kg	500	3/2/2017 4:55:11 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	3/2/2017 4:15:09 AM
Toluene	ND	0.049		mg/Kg	1	3/2/2017 4:15:09 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 4:15:09 AM
Xylenes, Total	ND	0.098		mg/Kg	1	3/2/2017 4:15:09 AM
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	3/2/2017 4:15:09 AM
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	3/2/2017 4:15:09 AM
Surr: Dibromofluoromethane	108	70-130		%Rec	1	3/2/2017 4:15:09 AM
Surr: Toluene-d8	98.1	70-130		%Rec	1	3/2/2017 4:15:09 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 4:15:09 AM
Surr: BFB	91.0	70-130		%Rec	1	3/2/2017 4:15:09 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
Project: Samnal Lease
Lab ID: 1702B58-026

Matrix: SOIL

Client Sample ID: S-9-2
Collection Date: 2/22/2017 4:30:00 PM
Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	23	10		mg/Kg	1	3/2/2017 8:52:38 AM
Surr: DNOP	106	70-130		%Rec	1	3/2/2017 8:52:38 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	18000	750		mg/Kg	500	3/2/2017 5:07:35 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	3/2/2017 4:43:52 AM
Toluene	ND	0.048		mg/Kg	1	3/2/2017 4:43:52 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2017 4:43:52 AM
Xylenes, Total	ND	0.096		mg/Kg	1	3/2/2017 4:43:52 AM
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	3/2/2017 4:43:52 AM
Surr: 4-Bromofluorobenzene	93.3	70-130		%Rec	1	3/2/2017 4:43:52 AM
Surr: Dibromofluoromethane	110	70-130		%Rec	1	3/2/2017 4:43:52 AM
Surr: Toluene-d8	101	70-130		%Rec	1	3/2/2017 4:43:52 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2017 4:43:52 AM
Surr: BFB	93.1	70-130		%Rec	1	3/2/2017 4:43:52 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-9-3

Project: Samnal Lease

Collection Date: 2/22/2017 4:55:00 PM

Lab ID: 1702B58-027

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	26	9.6		mg/Kg	1	3/2/2017 9:14:15 AM
Surr: DNOP	107	70-130		%Rec	1	3/2/2017 9:14:15 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	12000	750		mg/Kg	500	3/2/2017 5:20:00 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	3/2/2017 5:12:16 AM
Toluene	ND	0.049		mg/Kg	1	3/2/2017 5:12:16 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 5:12:16 AM
Xylenes, Total	ND	0.098		mg/Kg	1	3/2/2017 5:12:16 AM
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	3/2/2017 5:12:16 AM
Surr: 4-Bromofluorobenzene	92.2	70-130		%Rec	1	3/2/2017 5:12:16 AM
Surr: Dibromofluoromethane	114	70-130		%Rec	1	3/2/2017 5:12:16 AM
Surr: Toluene-d8	101	70-130		%Rec	1	3/2/2017 5:12:16 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 5:12:16 AM
Surr: BFB	95.0	70-130		%Rec	1	3/2/2017 5:12:16 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-10-1

Project: Samnal Lease

Collection Date: 2/22/2017 5:15:00 PM

Lab ID: 1702B58-028

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	73	9.7		mg/Kg	1	3/2/2017 9:35:39 AM
Surr: DNOP	108	70-130		%Rec	1	3/2/2017 9:35:39 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	11000	750		mg/Kg	500	3/2/2017 5:32:24 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	3/2/2017 5:40:31 AM
Toluene	ND	0.049		mg/Kg	1	3/2/2017 5:40:31 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 5:40:31 AM
Xylenes, Total	ND	0.098		mg/Kg	1	3/2/2017 5:40:31 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	3/2/2017 5:40:31 AM
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	1	3/2/2017 5:40:31 AM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	3/2/2017 5:40:31 AM
Surr: Toluene-d8	98.8	70-130		%Rec	1	3/2/2017 5:40:31 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 5:40:31 AM
Surr: BFB	89.1	70-130		%Rec	1	3/2/2017 5:40:31 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-10-2

Project: Samnal Lease

Collection Date: 2/22/2017 5:30:00 PM

Lab ID: 1702B58-029

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	55	10		mg/Kg	1	3/2/2017 9:57:18 AM
Surr: DNOP	108	70-130		%Rec	1	3/2/2017 9:57:18 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	8600	750		mg/Kg	500	3/2/2017 6:09:39 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	3/2/2017 6:09:17 AM
Toluene	ND	0.049		mg/Kg	1	3/2/2017 6:09:17 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 6:09:17 AM
Xylenes, Total	ND	0.087		mg/Kg	1	3/2/2017 6:09:17 AM
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	3/2/2017 6:09:17 AM
Surr: 4-Bromofluorobenzene	87.6	70-130		%Rec	1	3/2/2017 6:09:17 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	3/2/2017 6:09:17 AM
Surr: Toluene-d8	99.5	70-130		%Rec	1	3/2/2017 6:09:17 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 6:09:17 AM
Surr: BFB	89.9	70-130		%Rec	1	3/2/2017 6:09:17 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

CLIENT: Smith & Marrs

Client Sample ID: S-10-3

Project: Samnal Lease

Collection Date: 2/22/2017 5:50:00 PM

Lab ID: 1702B58-030

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	110	9.6		mg/Kg	1	3/2/2017 10:19:00 AM
Surr: DNOP	110	70-130		%Rec	1	3/2/2017 10:19:00 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	9400	750		mg/Kg	500	3/2/2017 6:22:04 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	3/2/2017 6:37:43 AM
Toluene	ND	0.048		mg/Kg	1	3/2/2017 6:37:43 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2017 6:37:43 AM
Xylenes, Total	ND	0.097		mg/Kg	1	3/2/2017 6:37:43 AM
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	3/2/2017 6:37:43 AM
Surr: 4-Bromofluorobenzene	87.8	70-130		%Rec	1	3/2/2017 6:37:43 AM
Surr: Dibromofluoromethane	111	70-130		%Rec	1	3/2/2017 6:37:43 AM
Surr: Toluene-d8	99.4	70-130		%Rec	1	3/2/2017 6:37:43 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2017 6:37:43 AM
Surr: BFB	88.9	70-130		%Rec	1	3/2/2017 6:37:43 AM

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

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

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-1**Project:** Samnal**Collection Date:** 3/24/2017 10:15:00 AM**Lab ID:** 1703D59-001**Matrix:** SOIL**Received Date:** 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	1100	30		mg/Kg	20	3/30/2017 11:00:18 AM

Second
Sampling
4-5 ft

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

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

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-2**Project:** Samnal**Collection Date:** 3/24/2017 10:45:00 AM**Lab ID:** 1703D59-002**Matrix:** SOIL**Received Date:** 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	8500	750		mg/Kg	500	3/30/2017 7:31:12 PM

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

Qualifiers:	•	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-3**Project:** Samnal**Collection Date:** 3/24/2017 11:10:00 AM**Lab ID:** 1703D59-003**Matrix:** SOIL**Received Date:** 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	4800	300		mg/Kg	200	3/30/2017 7:43:37 PM

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

Qualifiers:	•	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-4**Project:** Samnal**Collection Date:** 3/24/2017 11:30:00 AM**Lab ID:** 1703D59-004**Matrix:** SOIL**Received Date:** 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	780	30		mg/Kg	20	3/30/2017 12:27:08 PM

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 4 of 0
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-5**Project:** Samnal**Collection Date:** 3/24/2017 12:00:00 PM**Lab ID:** 1703D59-005**Matrix:** SOIL**Received Date:** 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	8600	300		mg/Kg	200	3/30/2017 7:56:01 PM

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

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

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-6**Project:** Samnal**Collection Date:** 3/24/2017 12:25:00 PM**Lab ID:** 1703D59-006**Matrix:** SOIL**Received Date:** 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	3300	150		mg/Kg	100	3/30/2017 8:08:28 PM

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

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

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-7**Project:** Samnal**Collection Date:** 3/24/2017 12:55:00 PM**Lab ID:** 1703D59-007**Matrix:** SOIL**Received Date:** 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	18000	750		mg/Kg	500	3/30/2017 8:20:51 PM

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

Qualifiers:	<ul style="list-style-type: none">• Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-8**Project:** Samnal**Collection Date:** 3/24/2017 1:20:00 PM**Lab ID:** 1703D59-008**Matrix:** SOIL**Received Date:** 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	9400	750		mg/Kg	500	3/30/2017 8:33:16 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank	Page 8 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-9**Project:** Samnal**Collection Date:** 3/24/2017 1:40:00 PM**Lab ID:** 1703D59-009**Matrix:** SOIL**Received Date:** 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	4500	150		mg/Kg	100	3/30/2017 8:10:30 PM

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

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

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-10**Project:** Samnal**Collection Date:** 3/24/2017 2:00:00 PM**Lab ID:** 1703D59-010**Matrix:** SOIL**Received Date:** 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	8800	750		mg/Kg	500	3/30/2017 9:22:55 PM

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

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



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

May 23, 2017

Jason Smith
Smith & Marrs
Box 516
Memphis, TX 79245
TEL: (432) 940-1900
FAX

RE: Samnal

OrderNo.: 1705874

Dear Jason Smith:

Hall Environmental Analysis Laboratory received 10 sample(s) on 5/17/2017 for the analyses presented in the following report.

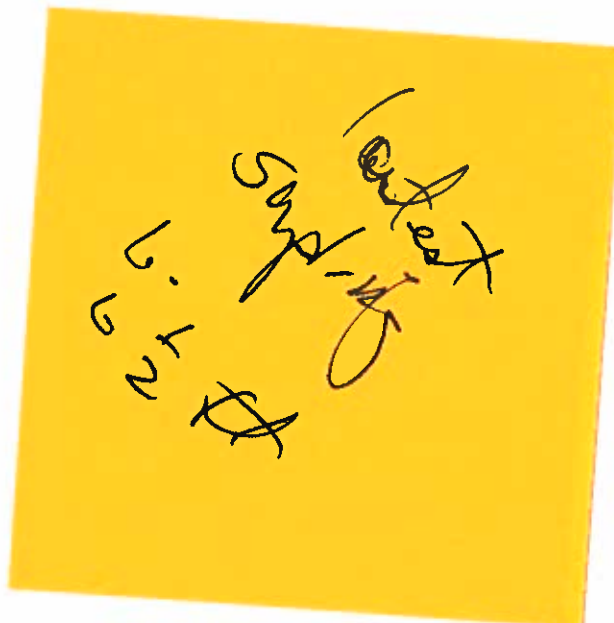
These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109



Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-1

Project: Samnal

Collection Date: 5/15/2017 6:20:00 AM

Lab ID: 1705874-001

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	2800	150		mg/Kg	100	5/18/2017 7:01:58 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-2**Project:** Samnal**Collection Date:** 5/15/2017 6:40:00 AM**Lab ID:** 1705874-002**Matrix:** SOIL**Received Date:** 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	2300	75		mg/Kg	50	5/19/2017 7:14:20 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1705874

Date Reported:

CLIENT: Smith & Marrs

Client Sample ID: S-3

Project: Samnal

Collection Date: 5/15/2017 7:00:00 AM

Lab ID: 1705874-003

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1200	75		mg/Kg	50	5/19/2017 7:26:45 PM

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

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

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-4**Project:** Samnal**Collection Date:** 5/15/2017 7:30:00 AM**Lab ID:** 1705874-004**Matrix:** SOIL**Received Date:** 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	310	30		mg/Kg	20	5/19/2017 7:39:10 PM

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

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

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-5**Project:** Samnal**Collection Date:** 5/15/2017 7:50:00 AM**Lab ID:** 1705874-005**Matrix:** SOIL**Received Date:** 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1200	75		mg/Kg	50	5/19/2017 7:51:35 PM

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

Qualifiers:	<ul style="list-style-type: none">• Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-6**Project:** Samnal**Collection Date:** 5/15/2017 8:15:00 AM**Lab ID:** 1705874-006**Matrix:** SOIL**Received Date:** 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	3800	150		mg/Kg	100	5/18/2017 8:04:00 PM

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

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

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-7**Project:** Samnal**Collection Date:** 5/15/2017 8:45:00 AM**Lab ID:** 1705874-007**Matrix:** SOIL**Received Date:** 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	880	30		mg/Kg	20	5/19/2017 8:41:13 PM

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

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

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-8**Project:** Samnal**Collection Date:** 5/15/2017 9:10:00 AM**Lab ID:** 1705874-008**Matrix:** SOIL**Received Date:** 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	360	30		mg/Kg	20	5/18/2017 8:53:38 PM

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

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

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-9**Project:** Samnal**Collection Date:** 5/15/2017 9:30:00 AM**Lab ID:** 1705874-009**Matrix:** SOIL**Received Date:** 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	7800	300		mg/Kg	200	5/18/2017 9:08:03 PM

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

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

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Smith & Marrs**Client Sample ID:** S-10**Project:** Samnal**Collection Date:** 5/15/2017 10:00:00 AM**Lab ID:** 1705874-010**Matrix:** SOIL**Received Date:** 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	3400	150		mg/Kg	100	5/19/2017 9:18:28 PM

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

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