

Summary of Sulfate Results compared to Background¹

Sample Number on Figure 2 Map	Depth	Sulfate mg/Kg	Background ²
SW2	1.5'	6400	8850
SW4	1'	5800	7700
SW5	1'	5400	7700
SW6	1'	5300	7700
SW7	1'	5100	7700
SW8	1'	5100	7700
SW9	0.5'	5100	6250
SW11	1.5'	5300	8850
BH2	3'	4100	7800
BH2	5.5	7500	7400
BH2	10'	6300	7200
BH4	1.5	5600	8850

¹SMA determined that the comparison of Nitrate Background data to Nitrate Excavation data are a Null Hypothesis

²Background numbers are an average of the 2 nearest delineation samples that is representing the soil horizon at given depth



Detailed Site and Sample Map
 Paul 25 24S 28E RB #221H- Matador Resources
 Malaja , New Mexico

Figure 2

Date Saved: 6/28/2017	By: _____	Date: _____	Revisions	Descr: _____
	By: _____	Date: _____		Descr: _____
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Drawn	<u>Lucas Middleton</u>
Checked	_____
Approved	_____



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 Serving the Southwest & Rocky Mountains

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: SW2

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:30:00 AM

Lab ID: 1706A44-001

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	5500	300		mg/Kg	200	6/27/2017 4:36:37 AM	32485
Nitrogen, Nitrate (As N)	8.4	6.0		mg/Kg	20	6/26/2017 1:05:47 PM	32485
Sulfate	6400	300		mg/Kg	200	6/27/2017 4:36:37 AM	32485

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
	PQL Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: SW4

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:30:00 AM

Lab ID: 1706A44-002

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	140	75		mg/Kg	50	6/27/2017 4:49:02 AM	32485
Nitrogen, Nitrate (As N)	1.9	0.30		mg/Kg	1	6/26/2017 1:43:01 PM	32485
Sulfate	5800	75		mg/Kg	50	6/27/2017 4:49:02 AM	32485

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
	PQL Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: SW5

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:30:00 AM

Lab ID: 1706A44-003

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1000	30		mg/Kg	20	6/26/2017 2:45:04 PM	32485
Nitrogen, Nitrate (As N)	2.3	1.5		mg/Kg	5	6/26/2017 2:32:40 PM	32485
Sulfate	5400	75		mg/Kg	50	6/27/2017 5:01:27 AM	32485

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
	PQL Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: SW6

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:30:00 AM

Lab ID: 1706A44-004

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	19	7.5		mg/Kg	5	6/26/2017 2:57:28 PM	32485
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	6/26/2017 2:57:28 PM	32485
Sulfate	5300	75		mg/Kg	50	6/27/2017 5:13:52 AM	32485

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
	PQL Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: SW7

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:30:00 AM

Lab ID: 1706A44-005

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	15	7.5		mg/Kg	5	6/26/2017 3:22:16 PM	32485
Nitrogen, Nitrate (As N)	1.7	1.5		mg/Kg	5	6/26/2017 3:22:16 PM	32485
Sulfate	5100	75		mg/Kg	50	6/27/2017 5:26:17 AM	32485

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
	PQL Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: SW8

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:30:00 AM

Lab ID: 1706A44-006

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1200	75		mg/Kg	50	6/27/2017 5:38:41 AM	32485
Nitrogen, Nitrate (As N)	1.9	1.5		mg/Kg	5	6/26/2017 4:11:55 PM	32485
Sulfate	5100	75		mg/Kg	50	6/27/2017 5:38:41 AM	32485

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
	PQL Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: SW9

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:30:00 AM

Lab ID: 1706A44-007

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	140	7.5		mg/Kg	5	6/26/2017 4:36:44 PM	32485
Nitrogen, Nitrate (As N)	2.8	1.5		mg/Kg	5	6/26/2017 4:36:44 PM	32485
Sulfate	5100	75		mg/Kg	50	6/27/2017 5:51:06 AM	32485

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
	PQL Practical Quantitative Limit	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: Souder, Miller & Associates

Client Sample ID: SW11

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:30:00 AM

Lab ID: 1706A44-008

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	87	7.5		mg/Kg	5	6/26/2017 5:01:33 PM	32485
Nitrogen, Nitrate (As N)	3.1	1.5		mg/Kg	5	6/26/2017 5:01:33 PM	32485
Sulfate	5300	75		mg/Kg	50	6/27/2017 6:03:30 AM	32485

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
	PQL Practical Quantitative Limit	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:** Souder, Miller & Associates**Client Sample ID:** BH 2-3**Project:** Matador Paul 2nd**Collection Date:** 6/12/2017 10:30:00 AM**Lab ID:** 1706A44-009**Matrix:** SOIL**Received Date:** 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3000	150		mg/Kg	100	6/27/2017 6:15:54 AM	32485
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	6/26/2017 5:26:23 PM	32485
Sulfate	4100	150		mg/Kg	100	6/27/2017 6:15:54 AM	32485

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
	PQL	Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: BH 2-5.5

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:30:00 AM

Lab ID: 1706A44-010

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	2100	150		mg/Kg	100	6/27/2017 6:28:19 AM	32485
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	6/26/2017 5:51:13 PM	32485
Sulfate	7500	150		mg/Kg	100	6/27/2017 6:28:19 AM	32485

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
	PQL Practical Quantitative Limit	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: Souder, Miller & Associates

Client Sample ID: BH 2-10

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:30:00 AM

Lab ID: 1706A44-011

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1200	150		mg/Kg	100	6/27/2017 9:08:03 AM	32485
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	6/26/2017 6:40:51 PM	32485
Sulfate	6300	150		mg/Kg	100	6/27/2017 9:08:03 AM	32485

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
	PQL Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: BH 4-1.5

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:30:00 AM

Lab ID: 1706A44-012

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	300	7.5		mg/Kg	5	6/26/2017 7:05:40 PM	32485
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	6/26/2017 7:05:40 PM	32485
Sulfate	5600	75		mg/Kg	50	6/27/2017 9:20:27 AM	32485

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
	PQL	Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: BGC-S

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:45:00 AM

Lab ID: 1706A44-013

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	24	7.5		mg/Kg	5	6/26/2017 7:30:29 PM	32485
Nitrogen, Nitrate (As N)	6.3	1.5		mg/Kg	5	6/26/2017 7:30:29 PM	32485
Sulfate	4800	75		mg/Kg	50	6/27/2017 9:32:52 AM	32485

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
	PQL Practical Quantitative Limit	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: Souder, Miller & Associates

Client Sample ID: BGC-1

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:45:00 AM

Lab ID: 1706A44-014

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1000	30		mg/Kg	20	6/26/2017 8:07:43 PM	32485
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	6/26/2017 7:55:18 PM	32485
Sulfate	7700	150		mg/Kg	100	6/27/2017 9:45:17 AM	32485

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
	PQL Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: BGC-2

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:45:00 AM

Lab ID: 1706A44-015

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3200	150		mg/Kg	100	6/27/2017 9:57:41 AM	32503
Nitrogen, Nitrate (As N)	1.5	1.5		mg/Kg	5	6/26/2017 9:09:47 PM	32503
Sulfate	10000	150		mg/Kg	100	6/27/2017 9:57:41 AM	32503

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
	PQL Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: BGC-3

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:45:00 AM

Lab ID: 1706A44-016

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	4800	300		mg/Kg	200	6/27/2017 10:10:05 AM	32503
Nitrogen, Nitrate (As N)	1.6	1.5		mg/Kg	5	6/26/2017 9:59:26 PM	32503
Sulfate	7800	300		mg/Kg	200	6/27/2017 10:10:05 AM	32503

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
	PQL Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: BGC-4

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:45:00 AM

Lab ID: 1706A44-017

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	4800	150		mg/Kg	100	6/27/2017 10:22:30 AM	32503
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	6/26/2017 10:24:16 PM	32503
Sulfate	9500	150		mg/Kg	100	6/27/2017 10:22:30 AM	32503

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
	PQL	Practical Quantitative Limit	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 **1706A44**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: BGC-6

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:45:00 AM

Lab ID: 1706A44-018

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3500	150		mg/Kg	100	6/27/2017 10:34:55 AM	32503
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	6/26/2017 10:49:05 PM	32503
Sulfate	5300	150		mg/Kg	100	6/27/2017 10:34:55 AM	32503

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
	PQL	Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: BGC-8

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:45:00 AM

Lab ID: 1706A44-019

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	2400	150		mg/Kg	100	6/27/2017 10:47:20 AM	32503
Nitrogen, Nitrate (As N)	1.6	1.5		mg/Kg	5	6/26/2017 11:38:45 PM	32503
Sulfate	8300	150		mg/Kg	100	6/27/2017 10:47:20 AM	32503

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
	PQL	Practical Quantitative Limit	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 **1706A44**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: BGC-10

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:45:00 AM

Lab ID: 1706A44-020

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	2700	150		mg/Kg	100	6/27/2017 10:59:44 AM	32503
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	6/27/2017 12:03:34 AM	32503
Sulfate	7200	150		mg/Kg	100	6/27/2017 10:59:44 AM	32503

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
	PQL	Practical Quantitative Limit	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 1706A44

Date Reported:

CLIENT: Souder, Miller & Associates

Client Sample ID: BGC-12

Project: Matador Paul 2nd

Collection Date: 6/12/2017 10:45:00 AM

Lab ID: 1706A44-021

Matrix: SOIL

Received Date: 6/20/2017 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1300	150		mg/Kg	100	6/27/2017 11:36:58 AM	32503
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	6/27/2017 12:28:23 AM	32503
Sulfate	7100	150		mg/Kg	100	6/27/2017 11:36:58 AM	32503

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
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified