HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 12, 2021

Naudiea Davis

Peabody New Mexico Services
El Segundo PO Box 757
Grants, NM 87020
TEL: (505) 285-3062
FAX:

RE: Lee Ranch Ground Water Wells OrderNo.: 2103B29

Dear Naudiea Davis:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/23/2021 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 #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: Four Corner in use Well
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 7:40:00 AM
Lab ID: 2103B29-001
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst: **bcv**	
Arsenic	ND	0.0010		mg/L	1	3/29/2021 5:16:43 PM	D76292
Copper	0.0033	0.0010		mg/L	1	3/29/2021 5:16:43 PM	D76292
Lead	ND	0.00050		mg/L	1	3/29/2021 5:16:43 PM	D76292
Selenium	ND	0.0010		mg/L	1	3/29/2021 5:16:43 PM	D76292
SODIUM ADSORPTION RATIO						Analyst: **ELS**	
Sodium Absorption Ratio	4.1	0			1	3/30/2021 8:22:00 AM	R76311
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Fluoride	1.1	0.10		mg/L	1	3/24/2021 7:48:34 PM	R76202
Chloride	7.2	0.50		mg/L	1	3/24/2021 7:48:34 PM	R76202
Sulfate	170	10		mg/L	20	3/24/2021 8:00:58 PM	R76202
Nitrate+Nitrite as N	ND	1.0		mg/L	5	4/6/2021 1:05:47 PM	R76492
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **MH**	
Conductivity	880	10		µmhos/c	1	3/30/2021 12:33:57 PM	R76334
SM2320B: ALKALINITY						Analyst: **MH**	
Bicarbonate (As CaCO3)	261.8	20.00		mg/L Ca	1	3/30/2021 12:33:57 PM	R76334
Carbonate (As CaCO3)	ND	2.000		mg/L Ca	1	3/30/2021 12:33:57 PM	R76334
Total Alkalinity (as CaCO3)	261.8	20.00		mg/L Ca	1	3/30/2021 12:33:57 PM	R76334
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **MH**	
Total Dissolved Solids	538	20.0	*	mg/L	1	3/30/2021 12:55:00 PM	59032
SM4500-H+B / 9040C: PH						Analyst: **MH**	
pH	7.81		H	pH units	1	3/30/2021 12:33:57 PM	R76334
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Aluminum	ND	0.020		mg/L	1	3/29/2021 9:50:10 AM	A76271
Barium	0.046	0.0020		mg/L	1	3/29/2021 9:50:10 AM	A76271
Boron	0.20	0.040		mg/L	1	3/29/2021 9:50:10 AM	A76271
Cadmium	ND	0.0020		mg/L	1	3/29/2021 9:50:10 AM	A76271
Calcium	41	1.0		mg/L	1	3/29/2021 9:50:10 AM	A76271
Chromium	ND	0.0060		mg/L	1	3/29/2021 9:50:10 AM	A76271
Cobalt	ND	0.0060		mg/L	1	3/29/2021 9:50:10 AM	A76271
Iron	ND	0.020		mg/L	1	3/29/2021 9:50:10 AM	A76271
Magnesium	23	1.0		mg/L	1	3/29/2021 9:50:10 AM	A76271
Manganese	ND	0.0020		mg/L	1	3/29/2021 9:50:10 AM	A76271
Molybdenum	ND	0.0080		mg/L	1	3/29/2021 9:50:10 AM	A76271
Nickel	ND	0.010		mg/L	1	3/29/2021 9:50:10 AM	A76271
Potassium	2.4	1.0		mg/L	1	3/29/2021 9:50:10 AM	A76271
Silver	ND	0.0050		mg/L	1	3/29/2021 9:50:10 AM	A76271

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: Four Corner in use Well
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 7:40:00 AM
Lab ID: 2103B29-001
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Sodium	130	5.0		mg/L	5	3/29/2021 9:51:47 AM	A76271
Sulfur	65	1.0		mg/L	1	3/29/2021 9:50:10 AM	A76271
Vanadium	ND	0.050		mg/L	1	3/29/2021 9:50:10 AM	A76271
Zinc	0.10	0.010		mg/L	1	3/30/2021 9:39:44 AM	A76311
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Iron	0.065	0.050		mg/L	1	3/30/2021 11:12:30 AM	59034
Manganese	0.0027	0.0020		mg/L	1	3/30/2021 11:12:30 AM	59034
EPA METHOD 245.1: MERCURY						Analyst: **ags**	
Mercury	ND	0.00020		mg/L	1	3/29/2021 2:32:21 PM	59025

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: PLD3
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 8:31:00 AM
Lab ID: 2103B29-003
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst: **bcv**	
Arsenic	ND	0.0010		mg/L	1	3/29/2021 5:27:15 PM	D76292
Copper	ND	0.0010		mg/L	1	3/29/2021 5:27:15 PM	D76292
Lead	ND	0.00050		mg/L	1	3/29/2021 5:27:15 PM	D76292
Selenium	ND	0.0010		mg/L	1	3/29/2021 5:27:15 PM	D76292
SODIUM ADSORPTION RATIO						Analyst: **ELS**	
Sodium Absorption Ratio	21	0			1	3/30/2021 8:22:00 AM	R76311
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Fluoride	0.67	0.50		mg/L	5	3/24/2021 8:38:12 PM	R76202
Chloride	ND	2.5		mg/L	5	3/24/2021 8:38:12 PM	R76202
Sulfate	18	2.5		mg/L	5	3/24/2021 8:38:12 PM	R76202
Nitrate+Nitrite as N	ND	1.0		mg/L	5	4/6/2021 1:18:40 PM	R76492
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **MH**	
Conductivity	530	10		µmhos/c	1	3/30/2021 12:47:44 PM	R76334
SM2320B: ALKALINITY						Analyst: **MH**	
Bicarbonate (As CaCO3)	244.6	20.00		mg/L Ca	1	3/30/2021 12:47:44 PM	R76334
Carbonate (As CaCO3)	12.16	2.000		mg/L Ca	1	3/30/2021 12:47:44 PM	R76334
Total Alkalinity (as CaCO3)	256.8	20.00		mg/L Ca	1	3/30/2021 12:47:44 PM	R76334
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **MH**	
Total Dissolved Solids	295	20.0		mg/L	1	3/30/2021 12:55:00 PM	59032
SM4500-H+B / 9040C: PH						Analyst: **MH**	
pH	8.69		*H	pH units	1	3/30/2021 12:47:44 PM	R76334
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Aluminum	ND	0.020		mg/L	1	3/29/2021 9:56:28 AM	A76271
Barium	0.11	0.0020		mg/L	1	3/29/2021 9:56:28 AM	A76271
Boron	0.12	0.040		mg/L	1	3/29/2021 9:56:28 AM	A76271
Cadmium	ND	0.0020		mg/L	1	3/29/2021 9:56:28 AM	A76271
Calcium	2.1	1.0		mg/L	1	3/29/2021 9:56:28 AM	A76271
Chromium	ND	0.0060		mg/L	1	3/29/2021 9:56:28 AM	A76271
Cobalt	ND	0.0060		mg/L	1	3/29/2021 9:56:28 AM	A76271
Iron	ND	0.020		mg/L	1	3/29/2021 9:56:28 AM	A76271
Magnesium	ND	1.0		mg/L	1	3/29/2021 9:56:28 AM	A76271
Manganese	0.0049	0.0020		mg/L	1	3/29/2021 9:56:28 AM	A76271
Molybdenum	ND	0.0080		mg/L	1	3/29/2021 9:56:28 AM	A76271
Nickel	ND	0.010		mg/L	1	3/29/2021 9:56:28 AM	A76271
Potassium	ND	1.0		mg/L	1	3/29/2021 9:56:28 AM	A76271
Silver	ND	0.0050		mg/L	1	3/29/2021 9:56:28 AM	A76271

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: PLD3
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 8:31:00 AM
Lab ID: 2103B29-003
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Sodium	130	5.0		mg/L	5	3/29/2021 9:58:03 AM	A76271
Sulfur	7.3	1.0		mg/L	1	3/29/2021 9:56:28 AM	A76271
Vanadium	ND	0.050		mg/L	1	3/29/2021 9:56:28 AM	A76271
Zinc	0.023	0.010		mg/L	1	3/30/2021 9:41:19 AM	A76311
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Iron	ND	0.050		mg/L	1	3/30/2021 11:14:07 AM	59034
Manganese	0.0053	0.0020		mg/L	1	3/30/2021 11:14:07 AM	59034
EPA METHOD 245.1: MERCURY						Analyst: **ags**	
Mercury	ND	0.00020		mg/L	1	3/29/2021 2:39:36 PM	59025

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: PLD4
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 9:30:00 AM
Lab ID: 2103B29-004
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst: **bcv**	
Arsenic	ND	0.0010		mg/L	1	3/29/2021 5:29:52 PM	D76292
Copper	ND	0.0010		mg/L	1	3/29/2021 5:29:52 PM	D76292
Lead	ND	0.00050		mg/L	1	3/29/2021 5:29:52 PM	D76292
Selenium	ND	0.0010		mg/L	1	3/29/2021 5:29:52 PM	D76292
SODIUM ADSORPTION RATIO						Analyst: **ELS**	
Sodium Absorption Ratio	14	0			1	3/30/2021 8:22:00 AM	R76311
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Fluoride	0.78	0.10		mg/L	1	3/24/2021 9:03:01 PM	R76202
Chloride	0.97	0.50		mg/L	1	3/24/2021 9:03:01 PM	R76202
Sulfate	16	0.50		mg/L	1	3/24/2021 9:03:01 PM	R76202
Nitrate+Nitrite as N	ND	1.0		mg/L	5	4/6/2021 1:31:32 PM	R76492
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **MH**	
Conductivity	460	10		µmhos/c	1	3/30/2021 1:02:33 PM	R76334
SM2320B: ALKALINITY						Analyst: **MH**	
Bicarbonate (As CaCO3)	200.8	20.00		mg/L Ca	1	3/30/2021 1:02:33 PM	R76334
Carbonate (As CaCO3)	5.360	2.000		mg/L Ca	1	3/30/2021 1:02:33 PM	R76334
Total Alkalinity (as CaCO3)	206.2	20.00		mg/L Ca	1	3/30/2021 1:02:33 PM	R76334
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **MH**	
Total Dissolved Solids	244	20.0		mg/L	1	3/30/2021 12:55:00 PM	59032
SM4500-H+B / 9040C: PH						Analyst: **MH**	
pH	8.53		*H	pH units	1	3/30/2021 1:02:33 PM	R76334
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Aluminum	ND	0.020		mg/L	1	3/29/2021 9:59:34 AM	A76271
Barium	0.18	0.0020		mg/L	1	3/29/2021 9:59:34 AM	A76271
Boron	0.12	0.040		mg/L	1	3/29/2021 9:59:34 AM	A76271
Cadmium	ND	0.0020		mg/L	1	3/29/2021 9:59:34 AM	A76271
Calcium	3.6	1.0		mg/L	1	3/29/2021 9:59:34 AM	A76271
Chromium	ND	0.0060		mg/L	1	3/29/2021 9:59:34 AM	A76271
Cobalt	ND	0.0060		mg/L	1	3/29/2021 9:59:34 AM	A76271
Iron	ND	0.020		mg/L	1	3/29/2021 9:59:34 AM	A76271
Magnesium	ND	1.0		mg/L	1	3/29/2021 9:59:34 AM	A76271
Manganese	0.0057	0.0020		mg/L	1	3/29/2021 9:59:34 AM	A76271
Molybdenum	ND	0.0080		mg/L	1	3/29/2021 9:59:34 AM	A76271
Nickel	ND	0.010		mg/L	1	3/29/2021 9:59:34 AM	A76271
Potassium	1.1	1.0		mg/L	1	3/29/2021 9:59:34 AM	A76271
Silver	ND	0.0050		mg/L	1	3/29/2021 9:59:34 AM	A76271

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: PLD4
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 9:30:00 AM
Lab ID: 2103B29-004
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Sodium	110	5.0		mg/L	5	3/29/2021 10:01:08 AM	A76271
Sulfur	5.8	1.0		mg/L	1	3/29/2021 9:59:34 AM	A76271
Vanadium	ND	0.050		mg/L	1	3/29/2021 9:59:34 AM	A76271
Zinc	0.025	0.010		mg/L	1	3/30/2021 11:56:30 AM	A76311
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Iron	ND	0.050		mg/L	1	3/30/2021 11:18:45 AM	59034
Manganese	0.0058	0.0020		mg/L	1	3/30/2021 11:18:45 AM	59034
EPA METHOD 245.1: MERCURY						Analyst: **ags**	
Mercury	ND	0.00020		mg/L	1	3/29/2021 2:41:59 PM	59025

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: PLD5
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 8:11:00 AM
Lab ID: 2103B29-005
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst: **bcv**	
Arsenic	ND	0.0010		mg/L	1	3/29/2021 5:32:30 PM	D76292
Copper	ND	0.0010		mg/L	1	3/29/2021 5:32:30 PM	D76292
Lead	ND	0.00050		mg/L	1	3/29/2021 5:32:30 PM	D76292
Selenium	ND	0.0010		mg/L	1	3/29/2021 5:32:30 PM	D76292
SODIUM ADSORPTION RATIO						Analyst: **ELS**	
Sodium Absorption Ratio	2.6	0			1	3/30/2021 8:22:00 AM	R76311
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Fluoride	0.52	0.50		mg/L	5	3/24/2021 9:52:38 PM	A76202
Chloride	5.3	2.5		mg/L	5	3/24/2021 9:52:38 PM	A76202
Sulfate	220	2.5		mg/L	5	3/24/2021 9:52:38 PM	A76202
Nitrate+Nitrite as N	ND	1.0		mg/L	5	4/6/2021 1:44:23 PM	R76492
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **MH**	
Conductivity	840	10		µmhos/c	1	3/30/2021 1:15:03 PM	R76334
SM2320B: ALKALINITY						Analyst: **MH**	
Bicarbonate (As CaCO3)	218.0	20.00		mg/L Ca	1	3/30/2021 1:15:03 PM	R76334
Carbonate (As CaCO3)	ND	2.000		mg/L Ca	1	3/30/2021 1:15:03 PM	R76334
Total Alkalinity (as CaCO3)	218.0	20.00		mg/L Ca	1	3/30/2021 1:15:03 PM	R76334
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **MH**	
Total Dissolved Solids	518	20.0	*	mg/L	1	3/30/2021 12:55:00 PM	59032
SM4500-H+B / 9040C: PH						Analyst: **MH**	
pH	7.89		H	pH units	1	3/30/2021 1:15:03 PM	R76334
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Aluminum	ND	0.020		mg/L	1	3/29/2021 10:02:43 AM	A76271
Barium	0.020	0.0020		mg/L	1	3/29/2021 10:02:43 AM	A76271
Boron	0.13	0.040		mg/L	1	3/29/2021 10:02:43 AM	A76271
Cadmium	ND	0.0020		mg/L	1	3/29/2021 10:02:43 AM	A76271
Calcium	52	1.0		mg/L	1	3/29/2021 10:02:43 AM	A76271
Chromium	ND	0.0060		mg/L	1	3/29/2021 10:02:43 AM	A76271
Cobalt	ND	0.0060		mg/L	1	3/29/2021 10:02:43 AM	A76271
Iron	1.1	0.10	*	mg/L	5	3/30/2021 9:52:53 AM	A76311
Magnesium	32	1.0		mg/L	1	3/29/2021 10:02:43 AM	A76271
Manganese	0.032	0.0020		mg/L	1	3/29/2021 10:02:43 AM	A76271
Molybdenum	ND	0.0080		mg/L	1	3/29/2021 10:02:43 AM	A76271
Nickel	ND	0.010		mg/L	1	3/29/2021 10:02:43 AM	A76271
Potassium	2.3	1.0		mg/L	1	3/29/2021 10:02:43 AM	A76271
Silver	ND	0.0050		mg/L	1	3/29/2021 10:02:43 AM	A76271

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: PLD5
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 8:11:00 AM
Lab ID: 2103B29-005
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Sodium	96	1.0		mg/L	1	3/29/2021 10:02:43 AM	A76271
Sulfur	71	1.0		mg/L	1	3/29/2021 10:02:43 AM	A76271
Vanadium	ND	0.050		mg/L	1	3/29/2021 10:02:43 AM	A76271
Zinc	0.022	0.010		mg/L	1	3/30/2021 11:58:03 AM	A76311
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Iron	11	1.0	*	mg/L	20	3/30/2021 11:45:20 AM	59034
Manganese	0.031	0.0020		mg/L	1	3/30/2021 11:23:33 AM	59034
EPA METHOD 245.1: MERCURY						Analyst: **ags**	
Mercury	ND	0.00020		mg/L	1	3/29/2021 2:44:22 PM	59025

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: Pit 8 Wells
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 10:00:00 AM
Lab ID: 2103B29-006
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst: **bcv**	
Arsenic	ND	0.0010		mg/L	1	3/29/2021 5:35:08 PM	D76292
Copper	0.0084	0.0010		mg/L	1	3/29/2021 5:35:08 PM	D76292
Lead	ND	0.00050		mg/L	1	3/29/2021 5:35:08 PM	D76292
Selenium	ND	0.0010		mg/L	1	3/29/2021 5:35:08 PM	D76292
SODIUM ADSORPTION RATIO						Analyst: **ELS**	
Sodium Absorption Ratio	18	0			1	3/30/2021 8:22:00 AM	R76311
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Fluoride	0.90	0.50		mg/L	5	3/24/2021 10:17:28 PM	A76202
Chloride	2.7	2.5		mg/L	5	3/24/2021 10:17:28 PM	A76202
Sulfate	18	2.5		mg/L	5	3/24/2021 10:17:28 PM	A76202
Nitrate+Nitrite as N	ND	1.0		mg/L	5	4/6/2021 1:57:15 PM	R76492
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **MH**	
Conductivity	660	10		µmhos/c	1	3/30/2021 1:27:12 PM	R76334
SM2320B: ALKALINITY						Analyst: **MH**	
Bicarbonate (As CaCO3)	304.0	20.00		mg/L Ca	1	3/30/2021 1:27:12 PM	R76334
Carbonate (As CaCO3)	23.76	2.000		mg/L Ca	1	3/30/2021 1:27:12 PM	R76334
Total Alkalinity (as CaCO3)	327.8	20.00		mg/L Ca	1	3/30/2021 1:27:12 PM	R76334
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **MH**	
Total Dissolved Solids	400	20.0		mg/L	1	3/30/2021 12:55:00 PM	59032
SM4500-H+B / 9040C: PH						Analyst: **MH**	
pH	8.81		*H	pH units	1	3/30/2021 1:27:12 PM	R76334
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Aluminum	0.061	0.020		mg/L	1	3/29/2021 10:11:54 AM	A76271
Barium	0.17	0.0020		mg/L	1	3/30/2021 9:54:27 AM	A76311
Boron	0.16	0.040		mg/L	1	3/30/2021 9:54:27 AM	A76311
Cadmium	ND	0.0020		mg/L	1	3/29/2021 10:11:54 AM	A76271
Calcium	4.2	1.0		mg/L	1	3/29/2021 10:11:54 AM	A76271
Chromium	ND	0.0060		mg/L	1	3/29/2021 10:11:54 AM	A76271
Cobalt	ND	0.0060		mg/L	1	3/29/2021 10:11:54 AM	A76271
Iron	0.12	0.020		mg/L	1	3/30/2021 9:54:27 AM	A76311
Magnesium	1.1	1.0		mg/L	1	3/29/2021 10:11:54 AM	A76271
Manganese	0.0060	0.0020		mg/L	1	3/29/2021 10:11:54 AM	A76271
Molybdenum	ND	0.0080		mg/L	1	3/29/2021 10:11:54 AM	A76271
Nickel	ND	0.010		mg/L	1	3/29/2021 10:11:54 AM	A76271
Potassium	2.5	1.0		mg/L	1	3/29/2021 10:11:54 AM	A76271
Silver	ND	0.0050		mg/L	1	3/29/2021 10:11:54 AM	A76271

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: Pit 8 Wells
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 10:00:00 AM
Lab ID: 2103B29-006
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Sodium	160	5.0		mg/L	5	3/29/2021 10:13:30 AM	A76271
Sulfur	7.4	1.0		mg/L	1	3/29/2021 10:11:54 AM	A76271
Vanadium	ND	0.050		mg/L	1	3/29/2021 10:11:54 AM	A76271
Zinc	0.027	0.010		mg/L	1	3/30/2021 11:59:42 AM	A76311
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Iron	0.47	0.050	*	mg/L	1	3/30/2021 11:24:53 AM	59034
Manganese	0.017	0.0020		mg/L	1	3/30/2021 11:24:53 AM	59034
EPA METHOD 245.1: MERCURY						Analyst: **ags**	
Mercury	ND	0.00020		mg/L	1	3/29/2021 2:46:45 PM	59025

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: Dr. Arroyo
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 10:30:00 AM
Lab ID: 2103B29-007
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst: **bcv**	
Arsenic	ND	0.0010		mg/L	1	3/29/2021 5:37:45 PM	D76292
Copper	ND	0.0010		mg/L	1	3/29/2021 5:37:45 PM	D76292
Lead	ND	0.00050		mg/L	1	3/29/2021 5:37:45 PM	D76292
Selenium	ND	0.0010		mg/L	1	3/29/2021 5:37:45 PM	D76292
SODIUM ADSORPTION RATIO						Analyst: **ELS**	
Sodium Absorption Ratio	13	0			1	3/30/2021 8:22:00 AM	R76311
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Fluoride	0.52	0.10		mg/L	1	3/24/2021 11:07:08 PM	A76202
Chloride	0.99	0.50		mg/L	1	3/24/2021 11:07:08 PM	A76202
Sulfate	11	0.50		mg/L	1	3/24/2021 11:07:08 PM	A76202
Nitrate+Nitrite as N	ND	1.0		mg/L	5	4/6/2021 3:10:23 PM	R76492
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **MH**	
Conductivity	390	10		µmhos/c	1	3/30/2021 1:45:00 PM	R76334
SM2320B: ALKALINITY						Analyst: **MH**	
Bicarbonate (As CaCO3)	183.2	20.00		mg/L Ca	1	3/30/2021 1:45:00 PM	R76334
Carbonate (As CaCO3)	2.720	2.000		mg/L Ca	1	3/30/2021 1:45:00 PM	R76334
Total Alkalinity (as CaCO3)	185.9	20.00		mg/L Ca	1	3/30/2021 1:45:00 PM	R76334
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **MH**	
Total Dissolved Solids	201	20.0		mg/L	1	3/30/2021 12:55:00 PM	59032
SM4500-H+B / 9040C: PH						Analyst: **MH**	
pH	8.44		H	pH units	1	3/30/2021 1:45:00 PM	R76334
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Aluminum	ND	0.020		mg/L	1	3/29/2021 10:15:04 AM	A76271
Barium	0.17	0.0020		mg/L	1	3/30/2021 9:56:02 AM	A76311
Boron	0.088	0.040		mg/L	1	3/30/2021 9:56:02 AM	A76311
Cadmium	ND	0.0020		mg/L	1	3/29/2021 10:15:04 AM	A76271
Calcium	3.1	1.0		mg/L	1	3/29/2021 10:15:04 AM	A76271
Chromium	ND	0.0060		mg/L	1	3/29/2021 10:15:04 AM	A76271
Cobalt	ND	0.0060		mg/L	1	3/29/2021 10:15:04 AM	A76271
Iron	ND	0.020		mg/L	1	3/29/2021 10:15:04 AM	A76271
Magnesium	ND	1.0		mg/L	1	3/29/2021 10:15:04 AM	A76271
Manganese	0.0039	0.0020		mg/L	1	3/29/2021 10:15:04 AM	A76271
Molybdenum	ND	0.0080		mg/L	1	3/29/2021 10:15:04 AM	A76271
Nickel	ND	0.010		mg/L	1	3/29/2021 10:15:04 AM	A76271
Potassium	ND	1.0		mg/L	1	3/29/2021 10:15:04 AM	A76271
Silver	ND	0.0050		mg/L	1	3/29/2021 10:15:04 AM	A76271

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

Qualifiers:

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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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Peabody New Mexico Services
Client Sample ID: Dr. Arroyo
Project: Lee Ranch Ground Water Wells
Collection Date: 3/23/2021 10:30:00 AM
Lab ID: 2103B29-007
Matrix: GROUNDWA
Received Date: 3/23/2021 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Sodium	94	1.0		mg/L	1	3/29/2021 10:15:04 AM	A76271
Sulfur	4.2	1.0		mg/L	1	3/29/2021 10:15:04 AM	A76271
Vanadium	ND	0.050		mg/L	1	3/29/2021 10:15:04 AM	A76271
Zinc	0.018	0.010		mg/L	1	3/30/2021 12:01:15 PM	A76311
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Iron	ND	0.050		mg/L	1	3/30/2021 11:26:31 AM	59034
Manganese	0.0057	0.0020		mg/L	1	3/30/2021 11:26:31 AM	59034
EPA METHOD 245.1: MERCURY						Analyst: **ags**	
Mercury	ND	0.00020		mg/L	1	3/29/2021 2:53:54 PM	59025

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

ANALYTICAL REPORT

April 02, 2021

Hall Environmental Analysis Laboratory

Sample Delivery Group:	L1330809
Samples Received:	03/25/2021
Project Number:	
Description:	

Report To: Jackie Bolte
4901 Hawkins NE
Albuquerque, NM 87109

Entire Report Reviewed By:

John Hawkins
Project Manager

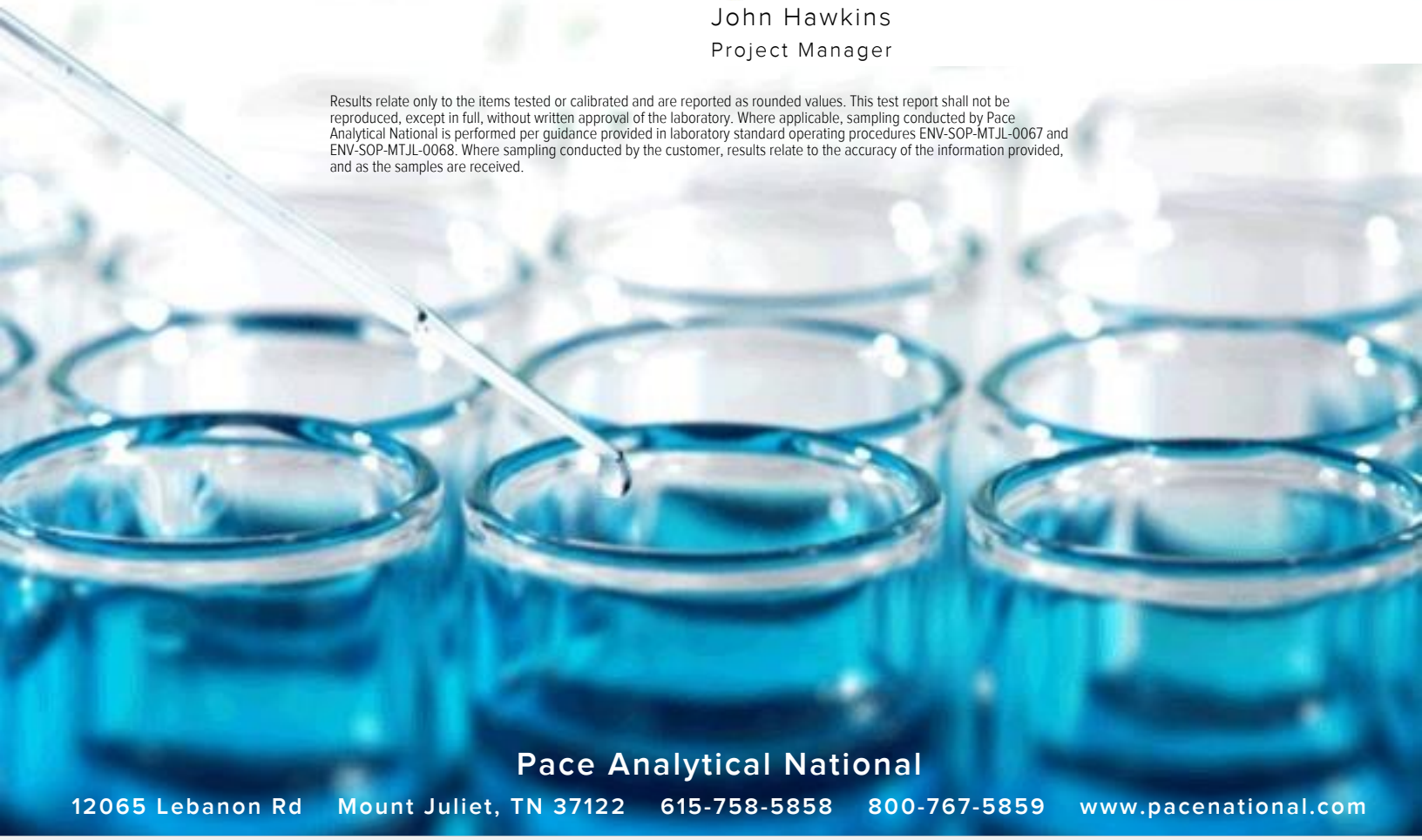

TABLE OF CONTENTS

2103B29-001 FOUR CORNERS IN USE WELL L1330809-01 WW

Collected by	Collected date/time	Received date/time
	03/23/21 07:40	03/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 420.4	WG1643473	1	04/02/21 00:30	04/02/21 05:51	SDL	Mt. Juliet, TN
Wet Chemistry by Method 4500CN E-2011	WG1641785	1	03/28/21 17:11	03/29/21 16:19	JER	Mt. Juliet, TN

2103B29-003 PLD3 L1330809-02 WW

Collected by	Collected date/time	Received date/time
	03/23/21 08:31	03/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 420.4	WG1643473	1	04/02/21 00:30	04/02/21 05:52	SDL	Mt. Juliet, TN
Wet Chemistry by Method 4500CN E-2011	WG1641785	1	03/28/21 17:11	03/29/21 16:20	JER	Mt. Juliet, TN

2103B29-004 PLD4 L1330809-03 WW

Collected by	Collected date/time	Received date/time
	03/23/21 09:30	03/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 420.4	WG1643473	1	04/02/21 00:30	04/02/21 05:53	SDL	Mt. Juliet, TN
Wet Chemistry by Method 4500CN E-2011	WG1641785	1	03/28/21 17:11	03/29/21 16:22	JER	Mt. Juliet, TN

2103B29-005 PLD5 L1330809-04 WW

Collected by	Collected date/time	Received date/time
	03/23/21 08:11	03/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 420.4	WG1643473	1	04/02/21 00:30	04/02/21 05:54	SDL	Mt. Juliet, TN
Wet Chemistry by Method 4500CN E-2011	WG1641785	1	03/28/21 17:11	03/29/21 17:05	JER	Mt. Juliet, TN

2103B29-006 PIT 8 WELLS L1330809-05 WW

Collected by	Collected date/time	Received date/time
	03/23/21 10:00	03/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 420.4	WG1643473	1	04/02/21 00:30	04/02/21 05:54	SDL	Mt. Juliet, TN
Wet Chemistry by Method 4500CN E-2011	WG1641785	1	03/28/21 17:11	03/29/21 17:06	JER	Mt. Juliet, TN

2103B29-007 DR. ARROYO L1330809-06 WW

Collected by	Collected date/time	Received date/time
	03/23/21 10:30	03/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 420.4	WG1643473	1	04/02/21 00:30	04/02/21 05:57	SDL	Mt. Juliet, TN
Wet Chemistry by Method 4500CN E-2011	WG1641785	1	03/28/21 17:11	03/29/21 17:07	JER	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

John Hawkins
Project Manager

Wet Chemistry by Method 420.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Total Phenol by 4AAP	ND		0.0400	1	04/02/2021 05:51	WG1643473

Wet Chemistry by Method 4500CN E-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Cyanide	ND		0.00500	1	03/29/2021 16:19	WG1641785

Wet Chemistry by Method 420.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Total Phenol by 4AAP	ND		0.0400	1	04/02/2021 05:52	WG1643473

Wet Chemistry by Method 4500CN E-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Cyanide	ND		0.00500	1	03/29/2021 16:20	WG1641785

Wet Chemistry by Method 420.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Total Phenol by 4AAP	ND		0.0400	1	04/02/2021 05:53	WG1643473

Wet Chemistry by Method 4500CN E-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Cyanide	ND		0.00500	1	03/29/2021 16:22	WG1641785

Wet Chemistry by Method 420.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Total Phenol by 4AAP	ND		0.0400	1	04/02/2021 05:54	WG1643473

Wet Chemistry by Method 4500CN E-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Cyanide	ND		0.00500	1	03/29/2021 17:05	WG1641785

Wet Chemistry by Method 420.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Total Phenol by 4AAP	ND		0.0400	1	04/02/2021 05:54	WG1643473

Wet Chemistry by Method 4500CN E-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Cyanide	ND		0.00500	1	03/29/2021 17:06	WG1641785

Wet Chemistry by Method 420.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Total Phenol by 4AAP	ND		0.0400	1	04/02/2021 05:57	WG1643473

Wet Chemistry by Method 4500CN E-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Cyanide	ND		0.00500	1	03/29/2021 17:07	WG1641785

Method Blank (MB)

(MB) R3637305-1 04/02/21 05:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Total Phenol by 4AAP	U		0.00830	0.0400

L1330796-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1330796-01 04/02/21 05:44 • (DUP) R3637305-3 04/02/21 05:45

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Phenol by 4AAP	0.170	0.0870	1	64.4	P1	20

L1330808-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1330808-01 04/02/21 05:49 • (DUP) R3637305-6 04/02/21 05:50

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Phenol by 4AAP	ND	0.0479	1	39.5	P1	20

Laboratory Control Sample (LCS)

(LCS) R3637305-2 04/02/21 05:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Phenol by 4AAP	0.500	0.533	107	90.0-110	

L1330796-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1330796-01 04/02/21 05:44 • (MS) R3637305-4 04/02/21 05:47 • (MSD) R3637305-5 04/02/21 05:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Total Phenol by 4AAP	1.00	0.170	1.04	0.971	86.9	80.1	1	90.0-110	J6	J6	6.74	20

L1330808-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1330808-01 04/02/21 05:49 • (MS) R3637305-7 04/02/21 05:50

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Total Phenol by 4AAP	1.00	ND	0.984	95.2	1	90.0-110	

Method Blank (MB)

(MB) R3635963-1 03/29/21 16:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Cyanide	U		0.00180	0.00500

L1330418-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1330418-03 03/29/21 16:05 • (DUP) R3635963-3 03/29/21 16:06

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Cyanide	ND	ND	1	0.000		20

L1330809-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1330809-02 03/29/21 16:20 • (DUP) R3635963-6 03/29/21 16:21

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Cyanide	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3635963-2 03/29/21 16:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Cyanide	0.100	0.0928	92.8	87.1-120	

L1330616-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1330616-02 03/29/21 16:09 • (MS) R3635963-4 03/29/21 16:13 • (MSD) R3635963-5 03/29/21 16:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cyanide	0.100	ND	0.0982	0.0827	95.7	80.2	1	90.0-110		J6	17.1	20

L1330843-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1330843-03 03/29/21 17:13 • (MS) R3635963-7 03/29/21 17:14 • (MSD) R3635963-8 03/29/21 17:15

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cyanide	0.100	ND	0.0963	0.0982	94.4	96.3	1	90.0-110			1.95	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 2

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

SUB CONTRATOR: **Pace TN**	COMPANY: **PACE TN**	PHONE: **(800) 767-5859**	FAX: **(615) 758-5859**
ADDRESS: **12065 Lebanon Rd**		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: **Mt. Juliet, TN 37122**			L2330809

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS	
1	2103B29-001D	Four Corners in use Well	1LAMGH2SO4	Groundwater	3/23/2021 7:40:00 AM	1	420.1 Phenolics	-01
2	2103B29-001E	Four Corners in use Well	500AMBHDPE-NAOH	Groundwater	3/23/2021 7:40:00 AM	1	Total CN	-01
3	2103B29-002D	PLD2	1LAMGH2SO4	Groundwater	3/23/2021 9:10:00 AM	1	420.1 Phenolics	
4	2103B29-002E	PLD2	500AMBHDPE-NAOH	Groundwater	3/23/2021 9:10:00 AM	1	Total CN	
5	2103B29-003D	PLD3	1LAMGH2SO4	Groundwater	3/23/2021 8:31:00 AM	1	420.1 Phenolics	-02
6	2103B29-003E	PLD3	500AMBHDPE-NAOH	Groundwater	3/23/2021 8:31:00 AM	1	Total CN	-02
7	2103B29-004D	PLD4	1LAMGH2SO4	Groundwater	3/23/2021 9:30:00 AM	1	420.1 Phenolics	-03
8	2103B29-004E	PLD4	500AMBHDPE-NAOH	Groundwater	3/23/2021 9:30:00 AM	1	Total CN	-03
9	2103B29-005D	PLD5	1LAMGH2SO4	Groundwater	3/23/2021 8:11:00 AM	1	420.1 Phenolics	-04
10	2103B29-005E	PLD5	500AMBHDPE-NAOH	Groundwater	3/23/2021 8:11:00 AM	1	Total CN	-04
11	2103B29-006D	Pit 8 Wells	1LAMGH2SO4	Groundwater	3/23/2021 10:00:00 AM	1	420.1 Phenolics	-05
12	2103B29-006E	Pit 8 Wells	500AMBHDPE-NAOH	Groundwater	3/23/2021 10:00:00 AM	1	Total CN	-05
13	2103B29-007D	Dr. Arroyo	1LAMGH2SO4	Groundwater	3/23/2021 10:30:00 AM	1	420.1 Phenolics	-06

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

C013

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
	3/24/2021	11:26 AM			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 3/25	Time 9:00

TAT: Standard ☒ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool ? _____ OK NOF
Comments: _____

COC52 3.5+.3=3.8 M160

1749 9998 4116

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 2 OF: 2

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

SUB CONTRATOR: **Pace TN**	COMPANY: **PACE TN**		PHONE: **(800) 767-5859**	FAX: **(615) 758-5859**	
ADDRESS: **12065 Lebanon Rd**			ACCOUNT #:	EMAIL:	
CITY, STATE, ZIP: **Mt. Juliet, TN 37122**					L1330809

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
14	2103B29-007E	Dr. Arroyo	500AMBHDP E-NAOH	Groundw ater	3/23/2021 10:30:00 AM	1	Total CN .06

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

NCF

Relinquished By:	Date: 3/24/2021	Time: 11:26 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 3/25	Time: 9:07

TAT: Standard ☒ **RUSH** Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool ? _____
Comments: _____

L1330809 HALLENVANM NCF TD

R5

Time estimate: oh **Time spent:** oh

Members

Troy Dunlap (responsible) JVH John V Hawkins

- [x] Login Clarification needed
- [ ] Chain of custody is incomplete
- [ ] Please specify Metals requested
- [ ] Please specify TCLP requested
- [ ] Received additional samples not listed on COC
- [ ] Sample IDs on containers do not match IDs on COC
- [ ] Client did not "X" analysis
- [ ] Chain of Custody is missing
- [ ] If no COC: Received by:_____
- [ ] If no COC: Date/Time:_____
- [ ] If no COC: Temp./Cont.Rec./pH:_____
- [ ] If no COC: Carrier:_____
- [ ] If no COC: Tracking #:_____
- [ ] Client informed by call
- [x] Client informed by Email
- [ ] Client informed by Voicemail
- [x] Date/Time:____3-26-21 2:47_____
- [x] PM initials:_____JVH_____
- [x] Client Contact:_____

Comments

Troy Dunlap *25 March 2021 6:33 PM*

Did not receive 002E or 002D.

Troy Dunlap *1 April 2021 9:22 AM*

Any word on this? Was sent on March 25th.

John V Hawkins *1 April 2021 11:21 AM*

Proceed with other samples client notified

John V Hawkins *1 April 2021 11:22 AM*

Hi John,

The client has verified that -002 on this COC was not sampled. Please proceed with the analysis for all other samples and disregard -002. Do you need an updated COC?

Thank You,

Erin Melendrez
Sample Receiving Manager
Hall Environmental
Ph l (505) 345-3975 (Ext.107)
Email l enm@hallenvironmental.com
Web l hallenvironmental.com

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**
12-Apr-21

Client: Peabody New Mexico Services
Project: Lee Ranch Ground Water Wells

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A76271** RunNo: **76271**
Prep Date: Analysis Date: **3/29/2021** SeqNo: **2700613** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	0.56	0.020	0.5000	0	112	85	115			
Barium	0.50	0.0020	0.5000	0	99.7	85	115			
Boron	0.52	0.040	0.5000	0	103	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.8	85	115			
Calcium	53	1.0	50.00	0	105	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.9	85	115			
Iron	0.54	0.020	0.5000	0	107	85	115			
Magnesium	52	1.0	50.00	0	104	85	115			
Manganese	0.50	0.0020	0.5000	0	100	85	115			
Molybdenum	0.50	0.0080	0.5000	0	100	85	115			
Nickel	0.48	0.010	0.5000	0	95.1	85	115			
Potassium	51	1.0	50.00	0	101	85	115			
Silver	0.098	0.0050	0.1000	0	98.2	85	115			
Sodium	51	1.0	50.00	0	103	85	115			
Vanadium	0.52	0.050	0.5000	0	103	85	115			

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A76271** RunNo: **76271**
Prep Date: Analysis Date: **3/29/2021** SeqNo: **2700631** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	0.020								
Barium	ND	0.0020								
Boron	ND	0.040								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Molybdenum	ND	0.0080								
Nickel	ND	0.010								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Vanadium	ND	0.050								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**

12-Apr-21

Client: Peabody New Mexico Services

Project: Lee Ranch Ground Water Wells

Sample ID: **LLLCS** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**

Client ID: **BatchQC** Batch ID: **A76271** RunNo: **76271**

Prep Date: Analysis Date: **3/29/2021** SeqNo: **2700633** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	0.020	0.01000	0	135	50	150			
Barium	0.0023	0.0020	0.002000	0	116	50	150			
Boron	ND	0.040	0.04000	0	96.8	50	150			
Cadmium	ND	0.0020	0.002000	0	97.9	50	150			
Calcium	ND	1.0	0.5000	0	104	50	150			
Chromium	ND	0.0060	0.006000	0	92.7	50	150			
Cobalt	0.0064	0.0060	0.006000	0	107	50	150			
Iron	0.023	0.020	0.02000	0	113	50	150			
Magnesium	ND	1.0	0.5000	0	104	50	150			
Manganese	ND	0.0020	0.002000	0	97.0	50	150			
Molybdenum	ND	0.0080	0.008000	0	96.9	50	150			
Nickel	ND	0.010	0.005000	0	108	50	150			
Potassium	ND	1.0	0.5000	0	105	50	150			
Silver	ND	0.0050	0.005000	0	95.2	50	150			
Sodium	ND	1.0	0.5000	0	100	50	150			
Vanadium	ND	0.050	0.01000	0	103	50	150			

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**

Client ID: **PBW** Batch ID: **A76311** RunNo: **76311**

Prep Date: Analysis Date: **3/30/2021** SeqNo: **2702131** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Boron	ND	0.040								
Iron	ND	0.020								
Zinc	ND	0.010								

Sample ID: **LLLCS** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**

Client ID: **BatchQC** Batch ID: **A76311** RunNo: **76311**

Prep Date: Analysis Date: **3/30/2021** SeqNo: **2702132** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020	0.002000	0	92.3	50	150			
Boron	ND	0.040	0.04000	0	98.4	50	150			
Iron	0.021	0.020	0.02000	0	104	50	150			
Zinc	0.011	0.010	0.01000	0	113	50	150			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**
12-Apr-21

Client: Peabody New Mexico Services
Project: Lee Ranch Ground Water Wells

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **A76311**	RunNo: **76311**
Prep Date:	Analysis Date: **3/30/2021**	SeqNo: **2702133** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	101	85	115			
Boron	0.53	0.040	0.5000	0	106	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	98.7	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**

12-Apr-21

Client: Peabody New Mexico Services

Project: Lee Ranch Ground Water Wells

Sample ID: **MB-59034** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **PBW** Batch ID: **59034** RunNo: **76311**

Prep Date: **3/29/2021** Analysis Date: **3/30/2021** SeqNo: **2701990** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.050								
Manganese	ND	0.0020								

Sample ID: **LLLCS-59034** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **BatchQC** Batch ID: **59034** RunNo: **76311**

Prep Date: **3/29/2021** Analysis Date: **3/30/2021** SeqNo: **2701992** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.050	0.02000	0	127	50	150			
Manganese	0.0023	0.0020	0.002000	0	116	50	150			

Sample ID: **LCS-59034** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **LCSW** Batch ID: **59034** RunNo: **76311**

Prep Date: **3/29/2021** Analysis Date: **3/30/2021** SeqNo: **2701994** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.51	0.050	0.5000	0	101	85	115			
Manganese	0.50	0.0020	0.5000	0	99.1	85	115			

Sample ID: **2103B29-003CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **PLD3** Batch ID: **59034** RunNo: **76311**

Prep Date: **3/29/2021** Analysis Date: **3/30/2021** SeqNo: **2702085** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.56	0.050	0.5000	0.02713	106	70	130			
Manganese	0.51	0.0020	0.5000	0.005322	102	70	130			

Sample ID: **2103B29-003CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **PLD3** Batch ID: **59034** RunNo: **76311**

Prep Date: **3/29/2021** Analysis Date: **3/30/2021** SeqNo: **2702086** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.57	0.050	0.5000	0.02713	108	70	130	1.46	20	
Manganese	0.51	0.0020	0.5000	0.005322	101	70	130	0.476	20	

Sample ID: **2103B29-004CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **PLD4** Batch ID: **59034** RunNo: **76311**

Prep Date: **3/29/2021** Analysis Date: **3/30/2021** SeqNo: **2702088** Units: **mg/L**

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

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**

12-Apr-21

Client: Peabody New Mexico Services

Project: Lee Ranch Ground Water Wells

Sample ID: **2103B29-004CMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PLD4**	Batch ID: **59034**	RunNo: **76311**
Prep Date: **3/29/2021**	Analysis Date: **3/30/2021**	SeqNo: **2702088** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.57	0.050	0.5000	0.02733	109	70	130			
Manganese	0.51	0.0020	0.5000	0.005830	101	70	130			

Sample ID: **2103B29-004CMSD**	SampType: **MSD**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PLD4**	Batch ID: **59034**	RunNo: **76311**
Prep Date: **3/29/2021**	Analysis Date: **3/30/2021**	SeqNo: **2702089** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.55	0.050	0.5000	0.02733	105	70	130	3.39	20	
Manganese	0.52	0.0020	0.5000	0.005830	102	70	130	1.20	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**
12-Apr-21

Client: Peabody New Mexico Services
Project: Lee Ranch Ground Water Wells

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **D76292**	RunNo: **76292**
Prep Date:	Analysis Date: **3/29/2021**	SeqNo: **2701548** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Copper	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								

Sample ID: **LCSLL**	SampType: **LCSLL**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **D76292**	RunNo: **76292**
Prep Date:	Analysis Date: **3/29/2021**	SeqNo: **2701549** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010	0.001000	0	94.2	50	150			
Copper	0.0010	0.0010	0.001000	0	103	50	150			
Lead	0.00051	0.00050	0.0005000	0	102	50	150			
Selenium	ND	0.0010	0.001000	0	58.8	50	150			

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **D76292**	RunNo: **76292**
Prep Date:	Analysis Date: **3/29/2021**	SeqNo: **2701550** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	98.6	85	115			
Copper	0.025	0.0010	0.02500	0	100	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.023	0.0010	0.02500	0	93.8	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**
12-Apr-21

Client: Peabody New Mexico Services
Project: Lee Ranch Ground Water Wells

Sample ID: **MB-59025** SampType: **MBLK** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **59025** RunNo: **76285**
Prep Date: **3/29/2021** Analysis Date: **3/29/2021** SeqNo: **2700974** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: **LLLCS-59025** SampType: **LCSLL** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **59025** RunNo: **76285**
Prep Date: **3/29/2021** Analysis Date: **3/29/2021** SeqNo: **2700976** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020	0.0001500	0	99.9	50	150			

Sample ID: **LCS-59025** SampType: **LCS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **59025** RunNo: **76285**
Prep Date: **3/29/2021** Analysis Date: **3/29/2021** SeqNo: **2700977** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	101	85	115			

Sample ID: **2103B29-001CMS** SampType: **MS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **Four Corner in use** Batch ID: **59025** RunNo: **76285**
Prep Date: **3/29/2021** Analysis Date: **3/29/2021** SeqNo: **2700979** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0052	0.00020	0.005000	0	104	75	125			

Sample ID: **2103B29-001CMSD** SampType: **MSD** TestCode: **EPA Method 245.1: Mercury**
Client ID: **Four Corner in use** Batch ID: **59025** RunNo: **76285**
Prep Date: **3/29/2021** Analysis Date: **3/29/2021** SeqNo: **2700980** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0052	0.00020	0.005000	0	105	75	125	1.21	20	

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**
12-Apr-21

Client: Peabody New Mexico Services
Project: Lee Ranch Ground Water Wells

Sample ID: **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R76202** RunNo: **76202**
Prep Date: Analysis Date: **3/24/2021** SeqNo: **2697957** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID: **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R76202** RunNo: **76202**
Prep Date: Analysis Date: **3/24/2021** SeqNo: **2697958** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.53	0.10	0.5000	0	106	90	110			
Chloride	4.8	0.50	5.000	0	96.8	90	110			
Sulfate	9.9	0.50	10.00	0	98.9	90	110			

Sample ID: **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **A76202** RunNo: **76202**
Prep Date: Analysis Date: **3/24/2021** SeqNo: **2698007** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID: **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **A76202** RunNo: **76202**
Prep Date: Analysis Date: **3/24/2021** SeqNo: **2698008** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.52	0.10	0.5000	0	104	90	110			
Chloride	4.8	0.50	5.000	0	95.7	90	110			
Sulfate	9.7	0.50	10.00	0	97.3	90	110			

Sample ID: **2103B29-007AMS** SampType: **ms** TestCode: **EPA Method 300.0: Anions**
Client ID: **Dr. Arroyo** Batch ID: **A76202** RunNo: **76202**
Prep Date: Analysis Date: **3/24/2021** SeqNo: **2698016** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.97	0.10	0.5000	0.5165	90.1	73.3	111			
Chloride	5.5	0.50	5.000	0.9859	90.4	84.2	117			
Sulfate	21	0.50	10.00	11.26	96.4	83.3	112			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**
12-Apr-21

Client: Peabody New Mexico Services
Project: Lee Ranch Ground Water Wells

Sample ID: **2103B29-007AMSD** SampType: **msd** TestCode: **EPA Method 300.0: Anions**
Client ID: **Dr. Arroyo** Batch ID: **A76202** RunNo: **76202**
Prep Date: Analysis Date: **3/24/2021** SeqNo: **2698017** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.95	0.10	0.5000	0.5165	85.8	73.3	111	2.24	20	
Chloride	5.3	0.50	5.000	0.9859	86.3	84.2	117	3.78	20	
Sulfate	21	0.50	10.00	11.26	92.4	83.3	112	1.96	20	

Sample ID: **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R76492** RunNo: **76492**
Prep Date: Analysis Date: **4/6/2021** SeqNo: **2710016** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID: **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R76492** RunNo: **76492**
Prep Date: Analysis Date: **4/6/2021** SeqNo: **2710027** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.4	0.20	3.500	0	96.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**

12-Apr-21

Client: Peabody New Mexico Services

Project: Lee Ranch Ground Water Wells

Sample ID: **lcs-1 99.5uS eC**	SampType: **lcs**	TestCode: **SM2510B: Specific Conductance**
Client ID: **LCSW**	Batch ID: **R76334**	RunNo: **76334**
Prep Date:	Analysis Date: **3/30/2021**	SeqNo: **2702940** Units: **µmhos/cm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	100	10	99.50	0	101	85	115			

Sample ID: **lcsd-1 99.5uS eC**	SampType: **lcsd**	TestCode: **SM2510B: Specific Conductance**
Client ID: **LCSS02**	Batch ID: **R76334**	RunNo: **76334**
Prep Date:	Analysis Date: **3/30/2021**	SeqNo: **2702941** Units: **µmhos/cm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	100	10	99.50	0	101	85	115	0.298	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**

12-Apr-21

Client: Peabody New Mexico Services

Project: Lee Ranch Ground Water Wells

Sample ID: **mb-1 alk**	SampType: **mblk**	TestCode: **SM2320B: Alkalinity**							
Client ID: **PBW**	Batch ID: **R76334**	RunNo: **76334**							
Prep Date:	Analysis Date: **3/30/2021**	SeqNo: **2702960**	Units: **mg/L CaCO3**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID: **lcs-1 alk**	SampType: **lcs**	TestCode: **SM2320B: Alkalinity**							
Client ID: **LCSW**	Batch ID: **R76334**	RunNo: **76334**							
Prep Date:	Analysis Date: **3/30/2021**	SeqNo: **2702961**	Units: **mg/L CaCO3**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	72.64	20.00	80.00	0	90.8	90	110			

Sample ID: **lcsd-1 alk**	SampType: **lcsd**	TestCode: **SM2320B: Alkalinity**							
Client ID: **LCSS02**	Batch ID: **R76334**	RunNo: **76334**							
Prep Date:	Analysis Date: **3/30/2021**	SeqNo: **2702962**	Units: **mg/L CaCO3**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	72.32	20.00	80.00	0	90.4	90	110	0.442	20	

Sample ID: **mb-2 alk**	SampType: **mblk**	TestCode: **SM2320B: Alkalinity**							
Client ID: **PBW**	Batch ID: **R76334**	RunNo: **76334**							
Prep Date:	Analysis Date: **3/30/2021**	SeqNo: **2702984**	Units: **mg/L CaCO3**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID: **lcs-2 alk**	SampType: **lcs**	TestCode: **SM2320B: Alkalinity**							
Client ID: **LCSW**	Batch ID: **R76334**	RunNo: **76334**							
Prep Date:	Analysis Date: **3/30/2021**	SeqNo: **2702985**	Units: **mg/L CaCO3**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	72.28	20.00	80.00	0	90.4	90	110			

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2103B29**
12-Apr-21

Client: Peabody New Mexico Services
Project: Lee Ranch Ground Water Wells

Sample ID: **MB-59032**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **59032**	RunNo: **76318**
Prep Date: **3/29/2021**	Analysis Date: **3/30/2021**	SeqNo: **2702210** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: **LCS-59032**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **59032**	RunNo: **76318**
Prep Date: **3/29/2021**	Analysis Date: **3/30/2021**	SeqNo: **2702211** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	982	20.0	1000	0	98.2	80	120			

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Peabody New Mexico Services** Work Order Number: **2103B29** RcptNo: **1**

Received By: **Cheyenne Cason** **3/23/2021 4:26:00 PM**

Completed By: **Cheyenne Cason** **3/24/2021 11:16:24 AM**

Reviewed By: SPA 3.24.21

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: 24 6 (<2 or >12 unless noted)
Adjusted? No
Checked by: SGL 3/24/21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☒ No ☐ NA ☑

Person Notified: Myron Newman Date: 3/26/21
By Whom: Erin Melendrez Via: ☐ eMail ☒ Phone ☐ Fax ☐ In Person
Regarding: Missing -002 sample set.
Client Instructions: -002 was not collected, disregard.

16. Additional remarks: -ENM 3/29/21

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.1	Good				
2	8.7	Good				

Chain-of-Custody Record

Client: Lee Ranch

Mailing Address: PO Box 757 Grants, NM 87020

Phone #: 505 285 3062

email or Fax#: Mnewman@Peabodyenergy.com NDavis@peabodyenergy.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
X Standard ☐ Rush

Project Name: Lee Ranch Gorund Water Wells

Project #: 453035065

Quote #: 1777

Project Manager: Naudiea Davis

Sampler: Myron Newman

On Ice: ☒ Yes ☐ No

# of Coolers: 1c

Cooler Temp(including CF): X 5.2-0.1 = 5.1 / 8.3-0.1 = 8.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2103B29
3/23/21	740	WT	FOUR CORNER IN USE WELL	6		001
3/23/21	910	WT	PLD2	6		002
3/23/21	831	WT	PLD3	6		003
3/23/21	930	WT	PLD4	6		004
3/23/21	811	WT	PLD5	6		005
3/23/21	1000	WT	PIT 8 WELLS	6		006
3/23/21	1030	WT	DR. ARROYO*	6		007

BTEX / MTBE / TMB's (8021) | TPH:8015D(GRO / DRO / MRO) | 8081 Pesticides/8082 PCB's | EDB (Method 504.1) | PAHs by 8310 or 8270SIMS | RCRA 8 Metals | Cl, F, Br, NO_3, NO_2, PO_4, SO | 8260 (VOA) | 8270 (Semi-VOA) | Total Coliform (Present/Absent)

See The Attached Parameters List

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
3/23/21	740	Myron Newman	CC	COO	3/23/21	1626
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
Per Myron N., -002 not collected-ENM 3/29/21

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

LR Wells
Max: 32/yr.

Test for:	Hall Bottels
pH	(1) 500mL NP plastic,
Conductivity	(1) 250mL HNO3 plastic
Total Dissolved Solids	(1) 125mL HNO3 plastic
Dissolved Sodium	(1) 125mL H2SO4 plastic
Dissolved Potassium	(1) 500mL NaOH Plastiic
Dissolved Calcium	(1) 1L Amber H2So4 Glass
Magnesium	
Sodium Adsorption Ratio	
Bicarbonate as CaCO3	
Carbonate as CaCO3	
Chloride	
Fluoride	
Sulfate	
Dissolved Nitrate	
Total Phenols	
Dissolved Aluminum	
Dissolved Arsenic	
Dissolved Barium	
Dissolved Boron	
Dissolved Cadmium	
Dissolved Chromium	
Dissolved Cobalt	
Dissolved Copper	
Total Cyanide	
Dissolved Iron	
Total Iron	
Dissolved Lead	
Dissolved Manganese	
Total Manganese	
Total Mercury	
Dissolved Molybdenum	
Dissolved Nickel	
Dissolved Selenium	
Dissolved Silver	
Dissolved Vanadium	
Dissolved Zinc	
Static Water Level	