

June 5, 2019

Dylan Rose-Coss New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division, District 1 1625 French Drive Hobbs, NM 88240

Ryan Mann Hobbs Field Office New Mexico State Land Office 2827 North Dal Paso Street, Suite 117 Hobbs, NM 88240

Incident IDNAB1912958012District RP1RP-5475Facility ID30-025-26949Application IDpAB1912957391

REVIEWED

By Dylan Rose-Coss at 12:51 pm, Jul 23, 2019



Deferral request denied.

Re: Site Assessment Report and Proposed Remediation Plan Site Name: San Simon 6 State Battery GPS: Latitude: 32.422908 Longitude: -103.400565 Legals: UL "H", Sec. 6, T22S, R35E Lea County, New Mexico NMOCD Ref. No. 1RP-5475

Lowry Environmental & Associates, LLC (LEA), on behalf of Legacy Reserves Operating, LP, has prepared this Site Assessment Report and Proposed Remediation Plan for the Release Site known as the San Simon 6 State Battery. Details of the release are summarized on the table below:

Nature and Volume of Release								
Date Release Discovered	4/8/2019 Source of Release Tank Battery							
Type of Polesso	Crude Oil and Broduced Water	Volume Released (bbls)	157					
Type of Release	Cidde Oli and Froddeed Water	Volume Recovered (bbls)	0					
Cause of Release								
The release was attributed to	a hole developing in the oil storage tank							
Affected Area								
The release affected within th	e earthen containment and on the adjac	ent caliche production pad mea	suring approximately 5,600 sq. ft.					
Was this a major release?	If YES, for what reasons (s) is this cons	idered a major release?						
Yes	Yes Volume Greater than 25 bbls							
If Yes, was immediate notice	given to the OCD? By whom? To whom	? When and by what means?						
Yes, Clyde Wilhoit, Jim Griswo	old, 4/8/2019 @ 5:20, Phone Message							

A copy of the Release Notification (NMOCD Form C-141) is provided as Attachment #8.

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Site Assessment/Characterization						
What is the shallowest depth to groundwater beneath the area affected by the release?	36-50 Ft					
Did this release impact groundwater or surface water?	No					
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	No					
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	No					
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	No					
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	No					
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	No					
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
Are the lateral extents of the release within 300 feet of a wetland?	No					
Are the lateral extents of the release overlying a subsurface mine?	No					
Are the lateral extents of the release overlying an unstable area such as karst geology?	No					
Are the lateral extents of the release within a 100-year floodplain?	No					
Did the release impact areas not on an exploration, development, production or storage site?	No					

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the average depth to groundwater within a 1 Mile radius of the Site and identify any registered water wells within a 1/2 Mile radius of the Site. A search of the USGS database identified one (1) water well (OSE CP 00593/USGS 322446103240501) approximately 0.47 Miles south-southeast of the Site.

Based on the volume and nature of the release, inferred depth to groundwater and NMOCD Siting Criteria, the NMOCD Closure Criteria for the Site is as follows:

Closure Criteria for Soil Impacted I	by a Release
Benzene	10 mg/kg
Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX)	50 mg/kg
Total Petroleum Hydrocarbons	100 mg/kg
Combined GRO and DRO	-
Chloride	600 mg/kg

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted on Figures 1 & 2. Depth to groundwater information is provided as Attachment #4. A Photographic Log is provided as Attachment #7.

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INITIAL SITE ASSESSMENT

On **April 9, 2019**, an initial assessment was conducted at the Site. During the initial assessment, seven (7) soil samples (V1 @ 6", V1 @ 12"R, V2 @ 6", V2 @ 12"R, V3 @ 6"R, V4 @ 3-6"R) were collected from within the release margins in an effort to determine the vertical extent of soil impact. The collected soil samples were submitted to an NMOCD-approved laboratory for analysis of TPH concentrations. Laboratory analytical results indicated TPH concentrations exceeded the NMOCD Closure Criteria in each of the submitted soil samples. Soil samples V1 @ @ 6", V2 @ 6", V3 @ 6"R and V4 @ 3-6"R were also analyzed for concentrations of BTEX and chloride. Analytical results indicated BTEX concentrations exceeded the NMOCD Closure Criteria in each of the analyzed soil samples and that chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples with the exception of soil sample V1 @ 6", which exhibited a chloride concentration of 1,280 mg/kg. Collection of soil samples from deeper intervals was precluded due to the presence of an impenetrable rock layer.

In addition, eleven (11) soil samples (NH @ 3-6"R, NH2 @ 3-6"R, EH1 @ 3-6"R, EH2 @ 3-6"R, EH3 @ 3-6"R, SH @ 3-6"R, WH1 @ 3-6", WH1 @ 12"R, WH2 @ 3-6", WH2 @ 12"R and WH3 @ 3-6"R) were collected from the inferred edges of the affected area and submitted to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples with the exception of soil samples NH @ 3-6"R, which exhibited a TPH concentration of 1,638 mg/kg and SH @ 3-6"R, which exhibited a TPH concentration of 350 mg/kg.

On **April 30, 2019**, LEA revisited the release site in an effort to further characterize affected soil at the Site. During the site visit, mechanical equipment was utilizing to advance seven (7) test trenches in the areas characterized by previous exceedances. During the advancement of the test trenches, twelve (12) soil samples (V1 @ 4', V1 @ 9'R, V2 @ 3', V2 @ 9'R, NH-V3 @ 4', NH-V3 @ 7', V4 @ 3', V4 @ 7', SH @ 3', SH @ 6', SH2 @ 3' and NH3 @ 6') were collected and submitted to the laboratory for analysis of TPH concentrations. Laboratory analytical results indicated TPH concentrations exceeded the NMOCD Closure Criteria in each of the submitted soil samples with the exception of soil samples V4 @ 7', SH @ 3', SH @ 6', SH2 @ 3' and V2 @ 9'R were also analyzed for concentrations of BTEX. Analytical results indicated BTEX concentrations exceeded the NMOCD Closure Criteria in each of soil samples V1 @ 4', V1 @ 9'R, V2 @ 3' and V2 @ 9'R, V4 @ 3', and V4 @ 7' were also analyzed for concentrations of BTEX. Analytical results indicated BTEX concentrations exceeded the NMOCD Closure Criteria in each of the submitted soil samples V1 @ 4', V1 @ 9'R, V4 @ 3', and V4 @ 7' were also analyzed for concentrations of chloride. Analytical results indicated chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil sample with the exception of V1 @ 4', which exhibited a chloride concentration of 1,200 mg/kg.

In addition, eleven (11) soil samples (NH @ 3-6"R, NH2 @ 3-6"R, EH1 @ 3-6"R, EH2 @ 3-6"R, EH3 @ 3-6"R, SH @ 3-6"R, WH1 @ 3-6", WH1 @ 12"R, WH2 @ 3-6", WH2 @ 12"R and WH3 @ 3-6"R) were collected from the inferred edges of the affected area and submitted to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples with the exception of soil samples NH @ 3-6"R, which exhibited a TPH concentration of 1,638 mg/kg and SH @ 3-6"R, which exhibited a TPH concentration of 350 mg/kg.

On **May 13**, **2019**, LEA revisited the release site in an effort to further characterize affected soil at the Site. During the site visit, a drilling rig was utilizing to advance four (4) soil borings (SB-1, SB-2, SB-3 and SBNH) in the areas characterized by previous exceedances. During the advancement of the soil bores, eleven (11) soil samples (SBNH @ 3', SBNH @ 6', SB-1 @ 18', SB-1 @ 24', SB-1 @ 36', SB-2 @ 12', SB-2 @ 15', SB-2 @ 30', SB-3 @ 9', SB-3 @ 12' and SB-3 @ 24') were collected and submitted to the laboratory for analysis of TPH concentrations. Laboratory analytical results indicated TPH concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples with the exception of soil sample SBNH @ 3', which exhibited a TPH concentration of 1,203 mg/kg.

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Soil samples SB-1 @ 18', SB-1 @ 36', SB-2 @ 12', SB-2 @ 30', SB-3 @ 9' and SB-3 @ 24' were also analyzed for concentrations of chloride, which were determined to be below the NMOCD Closure Criteria. Soil samples SB-1 @ 36', SB-2 @ 30' and SB-3 @ 24' were also analyzed for concentrations of BTEX, which were determined to be below the NMOCD Closure Criteria.

On **May 24, 2019**, LEA revisited the release site in an effort to further characterize affected soil at the Site. During the site visit, two (2) soil samples (NH 1C @ Surf. and NH 1C @ 1') were collected from the northern portion of the release site. The collected soil samples were submitted to the laboratory for analysis of TPH concentrations, which were determined to be below the NMOCD Closure Criteria.

Based on laboratory analytical results, affected soil was not impacted above the NMOCD Closure Criteria beyond 18 Ft. bgs in the area characterized by sample points SB-1 and V1; 12 Ft. bgs in the area characterized by sample points V2 and SB-2; 9 Ft. bgs in the area characterized by sample points V3, SB-3, NH and NH3; 6 Ft. bgs in the area characterized by sample point SBNH; or 3 Ft. bgs in the area characterized by sample point V4.

A table summarizing laboratory analytical results from soil samples collected during the initial site assessments is provided on the following page:

Concentrations of BTEX, TPH and/or Chloride in Soil - Initial Assessment(s)											
				SW 84	6 8021B		SV	V 846 8015M E	Ext.		E300/4500Cl
Sample ID	Date	Depth	Soil Status	Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
V1 @ 6"	4/9/19	6"	In-Situ	2.77	200	2,550	6,950	9,500	954	10,454	1,280
V1 @ 12"R	4/9/19	12"	In-Situ	-	-	1,980	7,600	9,580	1,120	10,700	-
V1 @ 4'	4/30/19	4'	Trench	0.61	52.11	1,100	5,800	6,900	2,100	9,000	1,200
V1 @ 9'R	4/30/19	9'	Trench	1.5	90.5	1,800.0	4,800	6,600	1,600	8,200	<59
SB-1 @ 18'	5/13/19	18'	In-Situ	-	-	<10.0	64.3	64.3	<10.0	64.3	48.0
SB-1 @ 24'	5/13/19	24'	In-Situ	-	-	<10.0	18.3	18.3	<10.0	18.3	-
SB-1 @ 36'	5/13/19	36'	In-Situ	<0.050	<0.300	<10.0	22.6	22.6	<10.0	22.6	<16.0
V2 @ 6"	4/9/19	6"	In-Situ	3.93	312	8,520	17,000	25,520	2,170	27,690	32.0
V2 @ 12"R	4/9/19	12"	In-Situ	-	-	7,420	14,300	21,720	1,730	23,450	-
V2 @ 3'	4/30/19	3'	Trench	1.8	74.8	670	5,600	6,270	1,700	7,970	-
V2 @ 9'R	4/30/19	9'	Trench	0.031	5.041	200	1,600	1,800	480	2,280	-
SB-2 @ 12'	5/13/19	12'	In-Situ	-	-	<10.0	45	45	<10.0	45.4	32.0
SB-2 @ 15'	5/13/19	15'	In-Situ	-	-	<10.0	21.6	21.6	<10.0	21.6	-
SB-2 @ 30'	5/13/19	30'	In-Situ	<0.050	<0.300	<10.0	32.6	32.6	<10.0	32.6	<16.0
V3 @ 6"R	4/9/19	6"	In-Situ	1.05	198	3,300	8,050	11,350	1,150	12,500	<16.0
NH-V3 @ 4'	4/30/19	4'	Trench	-	-	280	2,000	2,280	1,000	3,280	-
NH-V3 @ 7'	4/30/19	7'	Trench	-	-	<4.8	100	100	250	350	-
SB-3 @ 9'	5/13/19	9'	In-Situ	-	-	<10.0	10.7	10.7	<10.0	10.7	16.0
SB-3 @ 12'	5/13/19	12'	In-Situ	-	-	<10.0	14.5	14.5	<10.0	14.5	-
SB-3 @ 24'	5/13/19	24'	In-Situ	<0.050	<0.300	<10.0	10.4	10.4	<10.0	10.4	<16.0
V4 @ 3-6"R	4/9/19	3-6"	In-Situ	1.44	359	7,270	28,500	35,770	4,930	40,700	1,300
V4 @ 3'	4/30/19	3'	Trench	-	-	11	520	531	180	711	130
V4 @ 7'	4/30/19	7'	Trench	-	-	<4.8	10	10	<48	10	140
NH @ 3-6"R	4/9/19	3-6"	In-Situ	0.074	14.1	95.2	820	915	723	1,638	32
NH2 @ 3-6"R	4/9/19	3-6"	In-Situ	<0.050	0.886	<10.0	16.9	16.9	<10.0	16.9	336
EH1 @ 3-6"R	4/9/19	3-6"	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
EH2 @ 3-6"R	4/9/19	3-6"	In-Situ	<0.050	<0.820	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
EH3 @ 3-6"R	4/9/19	3-6"	In-Situ	<0.050	0.404	<10.0	<10.0	<10.0	10.6	10.6	<16.0
SH @ 3-6"R	4/9/19	3-6"	In-Situ	<0.050	10.4	57.6	149	207	143	350	48.0
SH @ 3'	4/30/19	3'	Trench	-	-	<4.7	<10.0	<10.0	<50.0	<50.0	-
SH @ 6'	4/30/19	6'	Trench	-	-	<4.8	<10.0	<10.0	<50.0	<50.0	-
WH1 @ 3-6"	4/9/19	3-6"	In-Situ	<0.050	1.2	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
WH1 @ 12"R	4/9/19	12"	In-Situ	<0.050	0.580	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
WH2 @ 3-6"	4/9/19	3-6"	In-Situ	<0.050	1.4	<10.0	12.2	12.2	29.0	41.2	<16.0
WH2 @ 12"R	4/9/19	12"	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
WH3 @ 3-6"R	4/9/19	3-6"	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SH2 @ 3'	4/30/19	3'	Trench	-	-	<4.8	84	84	<49	84	-
NH3 @ 6'	4/30/19	6'	Trench	-	-	48	8,500	8,548	3,000	11,548	-
SBNH @ 3'	5/13/19	3'	Trench	-	-	<10.0	963	963	240	1,203	-
SBNH @ 6'	5/13/19	6'	Trench	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	-
NH 1C @ Surf.	5/24/19	Surf.	In-Situ	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	-
NH 1C @ 1'	5/24/19	1'	In-Situ	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	-
Clo	osure C	riteria		10	50	-	-	-	-	100	600

A "Site & Sample Location Map" is provided as Attachment #3. Field Data, if applicable, is provided as Attachment #9. Soil profile observations are provided on Attachment #5. Laboratory analytical reports are provided as Attachment #6.

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PROPOSED REMEDIATION PLAN

Based on laboratory analytical results, site characteristics and field observations made during the initial site assessment, Legacy Reserves Operating, LP proposes the following remediation activities designed to advance the Site toward an approved closure:

•Utilizing mechanical equipment, excavate impacted soil in the northern portion of the release site in the area characterized by sample point SBNH to a depth beyond 3 Ft bgs, until laboratory analytical results from confirmation soil samples indicated BTEX, TPH and chloride concentration are below the NMOCD Closure Criteria.

•Excavate impacted soil in the north central portion of the release site in the areas characterized by sample points NH, NH3, NH-V3, V3 and SB-3 to a depth beyond 7 Ft bgs, until laboratory analytical results from confirmation soil samples indicated BTEX, TPH and chloride concentration are below the NMOCD Closure Criteria.

•Excavate impacted soil in the central portion of the release site in the areas characterized by sample points V2 and SB-2 to a depth beyond 9 Ft bgs, until laboratory analytical results from confirmation soil samples indicated BTEX, TPH and chloride concentration are below the NMOCD Closure Criteria.

•Excavate impacted soil in the southwest portion of the release site, not beneath or adjacent to the above ground storage tanks and associated utilities, in the areas characterized by sample points V1 and SB-1 to a depth beyond 9 Ft bgs, until laboratory analytical results from confirmation soil samples indicated BTEX, TPH and chloride concentration are below the NMOCD Closure Criteria.

•Excavate impacted soil in the southeast portion of the release site in the areas characterized by sample point V4 to a depth beyond 3 Ft bgs, until laboratory analytical results from confirmation soil samples indicated BTEX, TPH and chloride concentration are below the NMOCD Closure Criteria.

•Impacted soil affected above the NMOCD Closure Criteria adjacent to and beneath the above ground storage tanks and associated utilities will be excavated to the maximum extent practicable.

• Excavation sidewalls will be advanced horizontally until laboratory analytical results indicate concentrations of BTEX, TPH and chloride are below the NMOCD Closure Criteria. Impacted soil remaining in-situ beneath the above ground storage tank will be sampled for additional characterization and use in future remediation activities.

•Excavated soil will be temporarily stockpiled on-site, atop an impermeable liner, pending disposition at an NMOCD-approved disposal facility.

• Upon receiving favorable laboratory analytical results from confirmation soil samples (below the NMOCD Closure Criteria and NMOCD Reclamation Standards) excavated areas will be backfilled with locally sourced, non-impacted "like" material. Excavation backfill will be placed at or near original relative positions. The affected area will be contoured and/or compacted to achieve erosion control, stability and preservation of surface water flow to the extent practicable.

SAMPLING PLAN

Upon completion of excavation activities, representative five-point composite excavation confirmation soil samples will be collected from the excavation sidewalls in each cardinal direction, representing no more than **50 linear ft**. A minimum of **one (1)** representative five-point composite excavation confirmation soil sample will be collected from the base of the excavated area representing every **400 square feet**. Additional, "discrete" confirmation soil samples will be collected from wet or visibly stained areas inferred to have been affected by the release, as necessary.

TIMELINE AND ESTIMATED VOLUME OF SOIL TO BE REMEDIATED

Remediation activities are expected to be completed **within 90 days** of receiving necessary approval(s) of this Site Assessment Summary and Proposed Remediation Plan. Based on laboratory analytical results, site characteristics and field observations made during the initial site assessment it is estimated that approximately **2,100 cubic yards** of soil has been affected above the NMOCD Closure Criteria.

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DEFERRAL REQUEST

Impacted soil affected above the NMOCD Closure Criteria not beneath and adjacent to the above ground storage tanks and associated utilities will be excavated and transported to an NMOCD-approved disposal facility. Legacy requests NMOCD and NMSLO permission to remediate impacted soil affected above the NMOCD Closure Criteria beneath and adjacent to the above ground storage tanks and associated utilities once that facility is no longer in use.

Legacy maintains remediation of affected soil beneath and adjacent to the above ground storage tanks and associated utilities poses a risk to human health and safety and/or would require a major facility deconstruction.

RESTORATION, RECLAMATION AND RE-VEGETATION PLAN

The release was limited to an active caliche production pad. Restoration, reclamation and re-vegetation will be conducted in accordance with NMAC 19.15.29.13 once the facility is no longer needed for production or subsequent drilling operations. Once the area is no longer in use, restoration, reclamation and re-vegetation will include but is not limited to the following:

• Excavation and removal of impacted soil present within the top four (4) Ft. affected above 600 mg/kg.

• Backfill with non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg. Excavation backfill will include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.

• Upon reclaiming the facility, the Site will be reseeded in accordance with the landowner and/or applicable surface agency during the first favorable growing season.

• Areas affected by restoration and reclamation activities will be monitored until a life-form ratio of plus or minimum fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds.

If you have any questions, or need any additional information, please feel free to contact Brian Cunningham or the undersigned by phone or email.

Respectfully,

Joel W. Lowry Environmental Professional Lowry Environmental & Associates, LLC

Attachments:Attachment #1-Figure 1 - Topographic MapAttachment #2-Figure 2 - Aerial MapAttachment #3-Figure 3 - Site & Sample Location MapAttachment #4-Depth to Groundwater InformationAttachment #5-Soil ProfileAttachment #6-Laboratory Analytical ReportsAttachment #7-Photographic LogAttachment #8-Release Notification (FORM C-141)Attachment #9-Field Data

LIMITATIONS

This document has been prepared on behalf of Legacy Reserves Operating, LP. Use of information contained in this report, including exhibits and attachments, by any other party without the consent of LEA and/or Legacy Reserves Operating, LP is prohibited.

This document has been prepared in a professional manner, using the degree of skill and care exercised by similar environmental professionals. LEA notes that the facts and conditions referenced in this document may change over time and that the conclusions and recommendations are only applicable to the facts and conditions as described at the time this document was prepared.

LEA has prepared this report to the best of its ability. No other warranty, expressed or implied, is made or intended.

Attachment #1 Figure 1 - Topographic Map



Attachment #2 Figure 2 - Aerial Map



Attachment #3 Figure 3 - Site & Sample Location Map



Attachment #4 Depth to Groundwater Information



Territor Street Commission	W	late	New er C	v M Sol	le U	xia I m	co (nn/	Offi A	ce of /era	the State ge De	e Engine pth to	^{er} Wat	er	
(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD replaced, O=orphat C=the file closed)	has beer ned, e is	1	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters) (In feet)										
		POD		0.0										
POD Number	Code	Sud- basin	County	64 10	2Q 64	! Sec	Tws	Rng	x	Y	DistanceDepth	WellDenthV	Water Vater Column	
<u>CP 00593 POD1</u>		CP	LE	4	4	06	22S	35E	650422	3587591* 🥌	848	62		
<u>CC 00212 POD3</u>		CU	CU	34	2	07	02N	34E	649365	3587386 🥘	1466	368		
										Avera	ge Depth to Water:			
											Minimum Depth	:		
											Maximum Depth:			
Record Count: 2														
UTMNAD83 Radius	Search (in	meters)	<u>:</u>											
Easting (X): 650	386		North	ing (N	<i>(</i>):	3588	8439			Radius: 1610				
*UTM location was derived	from PLSS -	see Help												
The data is furnished by the N accuracy, completeness, reliab	MOSE/ISC a ility, usability	and is acc y, or suita	epted by the bility for an	e recipi y partic	ent ular	with t	he expr ose of th	essed un e data.	derstanding tl	hat the OSE/ISC ma	ake no warranties, exp	pressed or impli	ed, concerning the	
6/4/19 11:28 AM											WATER COLUI WATER	MN/ AVERA	GE DEPTH TO	

EXAMPLE STATE	? Water- level date-time a tion :Systern:	Water level, feet below land s Web Inte r	Water level, feet above specific facte ical datum	Referenced vertical datum	? Water- level accuracy Data Category:	? Status Geographic,	PUSGS Home Method of measurerfighUSGS	? Meas agen
					Groundwater	✓ United Star	tes 🗸 🗸	GO

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 Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs

site_no list =

• 322424103255801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 322424103255801 22S.34E.11.22442

Lea County, New Mexico Latitude 32°24'24", Longitude 103°25'58" NAD27 Land-surface elevation 3,517 feet above NAVD88 The depth of the well is 62 feet below land surface. This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data Tab-separated data

<u>Graph of data</u> Reselect period

Date	Time	? Water- level date- time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water- level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurem
1968-06-10	C	C	21.80			2	2 R	U		
1970-12-04	4	C	22.52			2	2	U		

		Explanation
Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	R	Site had been pumped recently.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	А	Approved for publication Processing and review completed.

Questions about sites/data? Feedback on this web site Automated retrievals Help Data Tips Explanation of terms

Subscribe for Date News	system chan	<u>1ęs</u>	Water level,	Water level,	Referenced vertical	?	?	?	?
		Water-	feet	feet	datum	Water-	Status	Method of	Meas
Accessibility	Plug-Ins	date-time	ac below Policies land	above specific		level accuracy		measurement	agen
<u>U.S. Departmen</u>	t of the Interior	acon Geological	Surveyce	vertical		-		USA.	ov
Title: Groundw	ater for USA:	Water Levels		datum				City and a	Made Easy
URL: https://r	wis.waterdat	a.usgs.gov/nwi	/gwlevels?						

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USGS Water Resources

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 Geographic Area:

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Search Results -- 1 sites found

Agency code = usgs

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 322424103255801 22S.34E.11.22442

Lea County, New Mexico Latitude 32°24'24", Longitude 103°25'58" NAD27 Land-surface elevation 3,517 feet above NAVD88 The depth of the well is 62 feet below land surface. This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

<u>Table of data</u> Tab-separated data

Graph of data

Reselect period

Date	Time	? Water- level date- time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water- level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measureme
1968-06-10)	C	21.80			:	2 R	U		
1970-12-04	1	C	22.52			:	2	U		

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	R	Site had been pumped recently.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	А	Approved for publication Processing and review completed.

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 Geographic Area:

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 322424103255801 22S.34E.11.22442

Lea County, New Mexico Latitude 32°24'24", Longitude 103°25'58" NAD27 Land-surface elevation 3,517 feet above NAVD88 The depth of the well is 62 feet below land surface. This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

<u>Table of data</u> Tab-separated data

Graph of data

Reselect period

Date	Time	? Water- level date- time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water- level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measureme
1968-06-10)	C	21.80			:	2 R	U		
1970-12-04	1	C	22.52			:	2	U		

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	R	Site had been pumped recently.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	А	Approved for publication Processing and review completed.

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EXAMPLE STATE	? Water- level date-time a tion :Systern:	Water level, feet below land s Web Inte r	Water level, feet above specific facte ical datum	Referenced vertical datum	? Water- level accuracy Data Category:	? Status Geographic,	PUSGS Home Method of measurerfighUSGS	? Meas agen
					Groundwater	✓ United Star	tes 🗸 🗸	GO

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Agency code = usgs

site_no list =

• 322446103240501

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 322446103240501 22S.35E.06.44114

Lea County, New Mexico Latitude 32°25'00", Longitude 103°24'06" NAD27

Land-surface elevation 3,598.00 feet above NGVD29

The depth of the well is 62 feet below land surface.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data

Tab-separated data

<u>Graph of data</u>

Reselect period

Date	Time	? Water- level date- time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water- level accuracy	? Status		? Method of measurement	? Measuring agency	? Source of measurem
1968-06-10		D	49.27				2	R	U		
1970-12-04		D	49.03				2		U		
1976-12-16		D	48.20				2		U		
1981-03-18		D	47.89				2		U		
1986-03-21		D	47.25				2		U		
1991-05-03		D	46.64				2		U		
1996-02-16		D	46.63				2		S		

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	R	Site had been pumped recently.
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	А	Approved for publication Processing and review completed.

Questions about isites/data?? Feedback on this web site Automated retrievals Help Data Tips Explanation of terms	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water- level accuracy	? Status	? Method of measurement	? Meas agen
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USGS Water Resources

Data Category: Groundwater Geographic Area: GO

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Search Results -- 1 sites found

Agency code = usgs

site_no list = • 322642103242301

Minimum number of levels = 1 Save file of selected sites to local disk for future upload

USGS 322642103242301 21S.35E.30.41132

Lea County, New Mexico Latitude 32°26'42", Longitude 103°24'23" NAD27 Land-surface elevation 3,614 feet above NAVD88 This well is completed in the Ogallala Formation (1210GLL) local aquifer.

Output formats

Table of data

Tab-separated data

<u>Graph of data</u>

Reselect period

Date	Time	? Water- level date- time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water- level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measureme
1968-03-28		D	32.81			2		U		
1971-02-10		D	32.97			2		U		
1976-12-15		D	31.71			2		U		
1981-03-05		D	30.68			2		U		
1986-03-20		D	30.80			2		U		
1991-05-02		D	31.97			2		U		
1996-02-13		D	31.58			2		S		

	Explanation							
Section	Code	Description						
Water-level date-time accuracy	D	Date is accurate to the Day						
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot						
Status		The reported water-level measurement represents a static level						
Method of measurement	S	Steel-tape measurement.						
Method of measurement	U	Unknown method.						
Measuring agency		Not determined						
Source of measurement	U	Source is unknown.						
Water-level approval status	А	Approved for publication Processing and review completed.						

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Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2019-06-04 14:06:12 EDT 0.59 0.43 nadww02 USA.gov

Attachment #5 Soil Profile

CPC Coordinates: 224257, 10340081 CPC Converting CPC Coordinates: 2635 F1 ams	Soil Bore Numb	ber: SB-:	1						
GL Elevation: 3 is readard begin Description begin Description begin Description t Imported Fil/Caliche 0-1 ibgs reactured Caliche 1-42bgs reactured Caliche	GPS Coordinate	es: 32.4	42257, -103.40081						
Method Drilleti: Mir Rotary Depth Description PD/Oder Chonde 1 Imported Fill/Caliche 0-1: bgs Imported Fill/Caliche 0-1: bgs Imported Fill/Caliche 0-1: bgs 2 Resilent Rock/Caliche 4-10' bgs Imported Fill/Caliche 0-1: bgs Imported Fill/Caliche 0-1: bgs 2 Resilent Rock/Caliche 4-10' bgs Imported Fill/Caliche 0-1: bgs Imported Fill/Caliche 0-1: bgs 1 Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs 1 Reddiah Brown Sond 10-2: 0' bgs Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs 1 Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs 1 Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs 1 Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs 1 Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs 1 Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs Imported Fill/Caliche 0-1: 0' bgs 2 Import	GL Elevation:	363	5 Ft amsl						
Description PED/Dair Description 1 Imported Fill/Caliche 0-1* bgs 2 Fractured Caliche 1-4* bgs 3 Fractured Caliche 1-10* bgs 4 Resilent Rock/Caliche 4-10* bgs 6 Imported Fill/Caliche 4-10* bgs 10 Imported Fill/Caliche 4-10* bgs 11 Imported Fill/Caliche 4-10* bgs 12 Imported Fill/Caliche 4-10* bgs 13 Reddish Brown Sand 10-23* bgs 14 Reddish Brown Sand 10-23* bgs 15 Imported Fill/Caliche 4-10* bgs 16 Imported Fill/Caliche 4-10* bgs 17 Imported Fill/Caliche 4-10* bgs 18 Imported Fill/Caliche 4-10* bgs 19 Imported Fill/Caliche 4-10* bgs 10 Imported Fill/Caliche 4-10* bgs	Method Drilled	: Air	Rotary						
Depth Description PDD/Oder Colorate 1 Imported Fill/Caliche 0-1' bgs									
	Depth	Description	n			PID/Odor	Chloride		
2 Fractured Coliche 1-4'bgs 3 Resilent Rock/Caliche 4-10' bgs 4 Image: Coliche 1-4'bgs 5 Image: Coliche 1-4'bgs 5 Image: Coliche 1-4'bgs 6 Image: Coliche 1-4'bgs 7 Resilent Rock/Caliche 4-10' bgs 8 Image: Coliche 1-4'bgs 10 Image: Coliche 1-4'bgs 11 Image: Coliche 1-4'bgs 12 Image: Coliche 1-4'bgs 13 Resilent Rock/Caliche 4-10' bgs 14 Image: Coliche 1-4'bgs 15 Image: Coliche 1-4'bgs 16 Image: Coliche 1-4'bgs 17 Image: Coliche 1-4'bgs 18 Image: Coliche 1-4'bgs 19 Image: Coliche 1-4'bgs 10 Image: Coliche 1-4'bgs 11 Image: Coliche 1-4'bgs 12 Image: Coliche 1-4'bgs 12 Image: Coliche 1-4'bgs 12 Image: Coliche 1-4'bgs 12 Image: Coliche 1-4'bgs 13 Image: Coliche 1-4'bgs 14 Image: Coliche 1-4'bgs 15 Image: Coliche 1-4'bgs <th>1</th> <th>Imported</th> <th>Fill/Caliche 0-1' bgs</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	1	Imported	Fill/Caliche 0-1' bgs						
a Fractured Caliche 1-4*bgs 4	2								
4	3	Fractured	l Caliche 1-4'bgs						
Redish Brown Sand 10-23' bgs Redish Brown San	4								
Resilent Rock/Caliche 4-10' bgs Reddish Brown Sond 10-23' bgs Reddish Brown Sond 10-23' bgs Trn Sond 23-36' bgs Reddish Brown Sond 10-23' bgs Reddish Brown	5								
7 Resident Nack/Calific 4-10' bgs 9	6								
8 Image: Second sec	7	Resilent F	Rock/Caliche 4-10' bgs						
9	8								
11 11 12 11 13 11 14 Reddish Brown Sond 10-23' bgs 15 11 16 11 17 11 18 11 19 11 20 11 21 11 22 11 23 Ton Sand 23-36' bgs 14 110 15 11 26 11 27 10 28 10 10 11 29 10 30 11 31 11 32 10 33 11 34 11 35 11 12 11 33 11 34 11 35 12 12 12 13 12 14 12 15 12 16 11 17 12	9								
11 Moderate	10								
13 Industrie Industrie 14 Reddish Brown Sand 10-23' bgs Industrie 15 Moderate Industrie 16 Industrie Industrie 17 Industrie Industrie 18 VV Light 408 19 Industrie Industrie 20 None Industrie 21 None Industrie 22 None Industrie 23 Tan Sand 23-36' bgs None Industrie 24 None Industrie Industrie 25 None Industrie Industrie 26 None Industrie Industrie 27 None Industrie Industrie 28 None Industrie Industrie 31 None Industrie Industrie 32 Sb-1 Industrie Industrie 29 Sb-1 Industrie Industrie 33 Industrie Industrie Industrie 34 Scoli Boring Log Scoli Boring	12					Moderate			
14 Reddish Brown Sand 10-23' bgs 15 Moderate 16 VV Light 17 VV Light 18 VV Light 19 VV Light 20 VV Light 21 None 22 None 23 Tan Sand 23-36' bgs 24 None 25 None 26 None 27 None 28 None 39 None 31 None 32 VV Light 33 VV Light 34 VV Light 35 VV Light 36 Up to the the client Seli Boring Log San Simon 6 State Battery Cented by: client GPS: 32.42257, -103.40084 Deateed by: client Date: 10 Lega Country, New Mexico Deateed by: client Date:	12					Moderate			
Image: Source of the set	13	Reddish F	Brown Sand 10-23' has						
16 17 17 18 19 10 20 11 21 11 22 11 23 Tan Sand 23-36' bgs 24 None 25 11 26 11 27 11 28 11 29 11 30 11 31 11 32 11 33 11 34 11 35 11 36 11 Soil Boring Log SB-1 Legacy Reserves Operating, LP San Simon 6 State Battery GPS: 32.42257, 103.40084 Leg County, New Mexico Date of bri bit Date of bri bit Checked by client Date: 65/2019	15		10 10 20 bys			Moderate			
17 18 19	16								
18	17								
19	18					VV Light	<108		
20 Image: Soli Boring Log Image: Soli Boring Log 23 Soli Boring Log VV. Light 24 Image: Soli Boring Log VV. Light 27 None Image: Soli Boring Log 36 VV. Light	19								
21 None	20								
22 23 Tan Sand 23-36' bgs Image: Constraint of the second s	21					None			
23 Tan Sand 23-36' bgs Image: Checked by: client	22								
24 None <108 25 Image: Im	23	Tan Sand	23-36' bgs						
25	24					None	<108		
26	25								
27 None 28 Image: Control of the second	26								
28 29 30 31 32 33 34 35 36 Soil Boring Log SB-1 Legacy Reserves Operating, LP San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico	27					None			
29 Image: Soli Boring Log 34 Image: Soli Boring Log 36 Soli Boring Log SB-1 Legacy Reserves Operating, LP San Simon 6 State Battery GPS: 32.42257, -103.40084 Lega County, New Mexico Drafted by: jwl Checked by: client Date: 6/5/2019	28								
30 None 31 None 32 None 33 None 34 None 35 VV. Light 36 VV. Light Soil Boring Log SB-1 Legacy Reserves Operating, LP San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico Drafted by: jwl Checked by: client Date: 6/5/2019	29								
31 32 33 34 35 36 None None VV. Light VV. Light Soil Boring Log SB-1 Legacy Reserves Operating, LP San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico Drafted by: jwl Checked by: client Date: 6/5/2019	30					None			
32 33 34 35 36 Soil Boring Log SB-1 Legacy Reserves Operating, LP San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico	31								
33 34 35 35 36 VV. Light Soil Boring Log SB-1 Lowrey Legacy Reserves Operating, LP environmental San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico Drafted by: jwl Checked by: client Date: 6/5/2019	32								
34 35 36 VV. Light Soil Boring Log SB-1 Legacy Reserves Operating, LP San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico Drafted by: iwl Checked by: client Date: 6/5/2019	33					None			
35 36 VV. Light <108 Soil Boring Log SB-1 Legacy Reserves Operating, LP San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico	34								
Soil Boring Log SB-1 Legacy Reserves Operating, LP San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico	35)0/ Light	<108		
Soil Boring Log SB-1 Legacy Reserves Operating, LP San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico	50				1	VV. Light	<108		
SB-1 EVENT Legacy Reserves Operating, LP environmental San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico Drafted by: iwl Checked by: client Date: 6/5/2019			Soil Bo	ring Log		T (MANDV	N/LO	
Legacy Reserves Operating, LP environmental San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico Drafted by: iwl Checked by: client Date: 6/5/2019			SE	3-1				1	
San Simon 6 State Battery GPS: 32.42257, -103.40084 Lea County, New Mexico Drafted by: iwl Checked by: client Date: 6/5/2019			Legacy Reserve	es Opera	iting, LP		environn	nental	
Lea County, New Mexico Drafted by: iwl Checked by: client Date: 6/5/2019			San Simon 6	State Ba	attery 40084			MA.	
			Les County	New M	exico	Drafted by: iwl	Checked by: client	Date: 6/5/	2019

Soil Bore Nu	mber: SB-	-2					
GPS Coordin	ates: 32	.42265, -103.40081					
GL Elevation	: 363	35 Ft amsl					
Method Dril	led: Air	Rotary					
Depth	Descriptic	on		PID/Odor	Chloride		
1	Importe	d Fill/Caliche 0-1' bgs					
2							
3							
4							
5	Resilent	Rock/Caliche 1-10' bgs					
6							
7							
8							
9							
10							
11							
12				V. Light	<108		
13	Reddich	Brown Sand 10-20' has					
14	Reduisii	BIOWII Sullu 10-20 bys		None	<108		
16				None	(100		
17							
18				VV Light			
19							
20							
21				None			
22							
23	Tan San	d 20-30' bgs					
24				VV Light			
25							
26							
27				None			
28							
29							
30				VV Light	<108		
31							
32							
33							
34							
35							
50							
		Soil E	Boring Log	T (MANDA	T shea	
			SB-2		JVVKI	*	
		Legacy Reser	ves Operating, LP		environn	nenta	1
		San Simon	6 State Battery			M	
		GPS: 32.422	265, -103.40081			IN	
		Lea Count	y, New Mexico	Drafted by: jwl	Checked by: client	Date:	6/5/2019

Soil Bore Nun	nber: SB-	3				
GPS Coordina	ates: 32.4	42272, -103.40081				
GL Elevation:	363	35 Ft amsl				
Method Drille	ed: Air	Rotary				
Depth	Description	n		PID/Odor	Chloride	
1	Importea	l Fill/Caliche 0-1' bgs		<u> </u>		
2	Fracture	Caliche 1-1' has		<u> </u>		
3	Tractare	cullent 1-4 bys				
5						
6						
7	Resilent I	Rock/Caliche 4-10' bgs				
8						
9				VV Light	<108	
10						
11				<u> </u>		
12				VV Light	<108	
13	Reddish I	Brown Sand 10-18' has				
14	Reduisir	brown Sund 10-18 bys		VV Light		
16						
17						
18				VV Light		
19						
20				<u> </u>		
21				VV Light		
22						
23	Tan Sand	l 18-24' bgs		<u> </u>		
24				None	<108	
25						
27						
28						
29						
30						
31						
32				<u> </u>		
33						
34						
35						
36						
		Soil	Boring Log	Τ		N/La
			SB-2		JWKI	
		Legacy Rese	rves Operating, LP		environn	nental
		San Simon	6 State Battery			(A)
		GPS: 32.42	272, -103.40081			<i>(11)</i>
		Lea Coun	ty, New Mexico	Drafted by: jwl	Checked by: client	Date: 6/5/2019

Attachment #6 Laboratory Analytical Reports



April 17, 2019

JOEL LOWRY CAPROCK SERVICES P.O. BOX 457 LOVINGTON, NM 88260

RE: SAN SIMON BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 04/12/19 13:41.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

CAPROCK SERVICES JOEL LOWRY P.O. BOX 457 LOVINGTON NM, 88260 Fax To:

Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: V1 @ 6" (H901359-01)

BTEX 8021B	mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	2.77	0.500	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	41.2	0.500	04/15/2019	ND	1.91	95.3	2.00	1.24	QM-07
Ethylbenzene*	26.9	0.500	04/15/2019	ND	2.03	102	2.00	2.39	QM-07
Total Xylenes*	129	1.50	04/15/2019	ND	6.33	106	6.00	2.63	QM-07
Total BTEX	200	3.00	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	122	73.3-12	9						
Chloride, SM4500Cl-B	mg	'kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1280	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	'kg	Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	2550	50.0	04/13/2019	ND	205	102	200	3.08	QM-07
DRO >C10-C28*	6950	50.0	04/13/2019	ND	201	101	200	2.86	QM-07
EXT DRO >C28-C36	954	50.0	04/13/2019	ND					
Surrogate: 1-Chlorooctane	155	% 41-142							
Surrogate: 1-Chlorooctadecane	239	37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

CAPROCK SERVICES JOEL LOWRY P.O. BOX 457 LOVINGTON NM, 88260 Fax To:

Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: V1 @ 12"R (H901359-02)

TPH 8015M	mg/l	kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	1980	50.0	04/13/2019	ND	205	102	200	3.08	
DRO >C10-C28*	7600	50.0	04/13/2019	ND	201	101	200	2.86	
EXT DRO >C28-C36	1120	50.0	04/13/2019	ND					
Surrogate: 1-Chlorooctane	159 % 41-142		?						
Surrogate: 1-Chlorooctadecane	255 %	6 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

CAPROCK SERVICES JOEL LOWRY P.O. BOX 457 LOVINGTON NM, 88260 Fax To:

Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: V2 @ 6" (H901359-03)

BTEX 8021B	mg/kg		Analyzed By: ms						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	3.93	0.200	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	61.6	0.200	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	50.9	0.200	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	196	0.600	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	312	1.20	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	191	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg,	/kg	Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	8520	50.0	04/13/2019	ND	205	102	200	3.08	
DRO >C10-C28*	17000	50.0	04/13/2019	ND	201	101	200	2.86	
EXT DRO >C28-C36	2170	50.0	04/13/2019	ND					
Surrogate: 1-Chlorooctane	261	% 41-142	?						
Surrogate: 1-Chlorooctadecane	432	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager


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Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: V2 @ 12"R (H901359-04)

TPH 8015M	mg/kg		Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	7420	50.0	04/13/2019	ND	205	102	200	3.08	
DRO >C10-C28*	14300	50.0	04/13/2019	ND	201	101	200	2.86	
EXT DRO >C28-C36	1730	50.0	04/13/2019	ND					
Surrogate: 1-Chlorooctane	255 %	6 41-142	?						
Surrogate: 1-Chlorooctadecane	350 %	6 37.6-14	7						

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Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: V3 @ 6" R (H901359-05)

BTEX 8021B	mg/	kg	Analyze	d By: ms					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	1.05	0.200	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	29.2	0.200	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	32.0	0.200	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	135	0.600	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	198	1.20	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	183 9	73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	3300	10.0	04/15/2019	ND	198	99.1	200	4.68	QM-07
DRO >C10-C28*	8050	10.0	04/15/2019	ND	188	93.9	200	5.65	QM-07
EXT DRO >C28-C36	1510	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	467 9	% 41-142	2						
Surrogate: 1-Chlorooctadecane	276 9	37.6-14	7						

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Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: NH @ 3-6" R (H901359-06)

BTEX 8021B	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.074	0.050	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	2.45	0.050	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	1.85	0.050	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	9.71	0.150	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	14.1	0.300	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 %	6 73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	95.2	10.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	820	10.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	723	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	85.9 %	% 41-142	2						
Surrogate: 1-Chlorooctadecane	105 %	6 37.6-14	7						

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Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: WH2 @ 3-6" (H901359-07)

BTEX 8021B	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	0.167	0.050	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	0.185	0.050	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	1.04	0.150	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	1.40	0.300	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.0 9	73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	12.2	10.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	29.0	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	92.9 9	% 41-142	?						
Surrogate: 1-Chlorooctadecane	91.0 \$	37.6-14	7						

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Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: WH2 @ 12" R (H901359-08)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	<0.050	0.050	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	<0.050	0.050	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	0.224	0.150	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	<0.300	0.300	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.8 %	73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	<10.0	10.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	<10.0	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	89.2 %	6 41-142							
Surrogate: 1-Chlorooctadecane	89.8 %	37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: WH1 @ 3-6" (H901359-09)

BTEX 8021B	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	0.143	0.050	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	0.167	0.050	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	0.891	0.150	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	1.20	0.300	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.8 9	73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	<10.0	10.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	<10.0	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	84.7 9	% 41-142	?						
Surrogate: 1-Chlorooctadecane	83.5 9	37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: WH1 @ 12" R (H901359-10)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	<0.050	0.050	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	0.095	0.050	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	0.485	0.150	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	0.580	0.300	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.8 %	73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	<10.0	10.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	<10.0	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	87.6 %	% 41-142							
Surrogate: 1-Chlorooctadecane	87.4 %	37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: EH1 @ 3-6" R (H901359-11)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	<0.050	0.050	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	<0.050	0.050	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	<0.150	0.150	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	<0.300	0.300	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.4 %	6 73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	<10.0	10.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	<10.0	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	79.3 %	6 41-142							
Surrogate: 1-Chlorooctadecane	77.9%	6 37.6-14	7						

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Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: EH2 @ 3-6" R (H901359-12)

BTEX 8021B	mg/	٨g	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	<0.050	0.050	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	0.118	0.050	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	0.702	0.150	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	0.820	0.300	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.2 %	6 73.3-12	9						
Chloride, SM4500Cl-B	mg/	٨g	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	٨g	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	<10.0	10.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	<10.0	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	83.9%	6 41-142							
Surrogate: 1-Chlorooctadecane	81.1 %	6 37.6-14	7						

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*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICES JOEL LOWRY P.O. BOX 457 LOVINGTON NM, 88260 Fax To:

Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: V4 @ 3-6" R (H901359-13)

BTEX 8021B	mg/	kg	Analyze	d By: ms					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	1.44	0.500	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	43.1	0.500	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	54.3	0.500	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	260	1.50	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	359	3.00	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	161 %	6 73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1300	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	7270	50.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	28500	50.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	4930	50.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	799 %	6 41-142	2						
Surrogate: 1-Chlorooctadecane	769 %	6 37.6-14	7						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICES JOEL LOWRY P.O. BOX 457 LOVINGTON NM, 88260 Fax To:

Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: SH @ 3-6" R (H901359-14)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	1.79	0.050	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	1.34	0.050	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	7.26	0.150	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	10.4	0.300	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	6 73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	57.6	10.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	149	10.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	143	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	84.9 9	% 41-142	2						
Surrogate: 1-Chlorooctadecane	86.4 9	37.6-14	7						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICES JOEL LOWRY P.O. BOX 457 LOVINGTON NM, 88260 Fax To:

Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: EH3 @ 3-6" R (H901359-15)

BTEX 8021B	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2019	ND	1.95	97.5	2.00	1.19	
Toluene*	<0.050	0.050	04/15/2019	ND	1.91	95.3	2.00	1.24	
Ethylbenzene*	0.069	0.050	04/15/2019	ND	2.03	102	2.00	2.39	
Total Xylenes*	0.335	0.150	04/15/2019	ND	6.33	106	6.00	2.63	
Total BTEX	0.404	0.300	04/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.1 %	6 73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	<10.0	10.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	10.6	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	84.4 %	6 41-142	,						
Surrogate: 1-Chlorooctadecane	84.6%	6 37.6-14	7						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICES JOEL LOWRY P.O. BOX 457 LOVINGTON NM, 88260 Fax To:

Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: NH2 @ 3-6" R (H901359-16)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/16/2019	ND	2.12	106	2.00	0.356	
Toluene*	0.064	0.050	04/16/2019	ND	2.26	113	2.00	0.640	
Ethylbenzene*	0.123	0.050	04/16/2019	ND	2.26	113	2.00	0.214	
Total Xylenes*	0.699	0.150	04/16/2019	ND	6.52	109	6.00	0.243	
Total BTEX	0.886	0.300	04/16/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 %	6 73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyze						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	16.9	10.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	<10.0	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	80.8 %	% 41-142							
Surrogate: 1-Chlorooctadecane	77.8 %	37.6-14	7						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICES JOEL LOWRY P.O. BOX 457 LOVINGTON NM, 88260 Fax To:

Received:	04/12/2019	Sampling Date:	04/09/2019
Reported:	04/17/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: WH3 @ 3-6" R (H901359-17)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/16/2019	ND	2.12	106	2.00	0.356	
Toluene*	<0.050	0.050	04/16/2019	ND	2.26	113	2.00	0.640	
Ethylbenzene*	<0.050	0.050	04/16/2019	ND	2.26	113	2.00	0.214	
Total Xylenes*	0.250	0.150	04/16/2019	ND	6.52	109	6.00	0.243	
Total BTEX	<0.300	0.300	04/16/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 %	6 73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/16/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/15/2019	ND	198	99.1	200	4.68	
DRO >C10-C28*	<10.0	10.0	04/15/2019	ND	188	93.9	200	5.65	
EXT DRO >C28-C36	<10.0	10.0	04/15/2019	ND					
Surrogate: 1-Chlorooctane	87.9 9	% 41-142							
Surrogate: 1-Chlorooctadecane	86.6 %	37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

FORM-000	Sampler - UPS	Delivered By:		Relinquished B	hour	weindnisned B	affiliates or successors arisi	analyses. All claims includin	PLEASE NOTE- I Tability	0	8	2	6	5	4	Ś	N		Lab I.D.	FOR LAB USE ONLY	Sampler Name:	Project Locatio	Project Name:	Project Owner:	Phone #:	Address: 303	Project Manage	Company Name		
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Page 20 of 21

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

FORM-000 R 2.0	Delivered By: (Circle One) Sampler - UPS - Bus - Other:	=	D	Lawrolandar	Day 4	service. In the event shall cardinal be lable for incidental or consequent, affiliates or successors arising out of or related to the performance of ser Polynomiachood By	analyses. All claims including those for negligence and any other cause	PLEASE NOTE: Liability and Damages. Cardinal's liability and client's av			17 WH3 @3-6"R	/6 NH2 @ 3-6"R	/S EH3 @ 3-6"R	14 SH @ 3-6"R	/3 V4 @ 3-6"R	/2 EH2 @ 3-6"R	// EH1 @ 3-6"R		Lab I.D. Sample I.D.		EOPTABLISEONIX	Project Location: Lea Co, NM	Project Name: San Simon Battery	Project Owner: Legacy Reserves Ope	Phone #: F		Address: 303 W. Wall St. Midland, TX 7	Project Manager: Joel Lowry	Company Name: Legacy Reserves Ope	101 East Marland, Hot (575) 393-2326 FAX	Laborati	Page 21 of 21
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† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476



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

May 09, 2019

Joel Lowry Caprock Services, LLC PO Box 457 Lovington, NM 88260 TEL: FAX

RE: Legacy San Simon

OrderNo.: 1905111

Dear Joel Lowry:

Hall Environmental Analysis Laboratory received 12 sample(s) on 5/2/2019 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/9/2019

CLIENT: Caprock Services, LLC Client Sample ID: V1@4' **Project:** Legacy San Simon Collection Date: 4/30/2019 1:15:00 PM Lab ID: 1905111-001 Matrix: SOIL Received Date: 5/2/2019 10:30:00 AM Analyses Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME **Diesel Range Organics (DRO)** 5800 96 mg/Kg 10 5/6/2019 1:33:13 PM Motor Oil Range Organics (MRO) 2100 480 mg/Kg 10 5/6/2019 1:33:13 PM Surr: DNOP 0 70-130 S %Rec 10 5/6/2019 1:33:13 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: RAA Gasoline Range Organics (GRO) 1100 5/6/2019 6:39:33 PM 96 mg/Kg 20 Surr: BFB 325 73.8-119 S %Rec 20 5/6/2019 6:39:33 PM **EPA METHOD 8021B: VOLATILES** Analyst: RAA Benzene 0.61 0.48 mg/Kg 20 5/6/2019 6:39:33 PM Toluene 0.96 20 7.9 mg/Kg 5/6/2019 6:39:33 PM

5.6

0.96

1.9

60

80-120

mg/Kg

mg/Kg

%Rec

mg/Kg

20

20

20

20

5/6/2019 6:39:33 PM

5/6/2019 6:39:33 PM

5/6/2019 6:39:33 PM

5/3/2019 6:24:43 PM

Analyst: smb

Xylenes, Total	38
Surr: 4-Bromofluorobenzene	107
EPA METHOD 300.0: ANIONS	
Chloride	1200

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

Qualifiers:

*

Ethylbenzene

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

в Analyte detected in the associated Method Blank

Е Value above quantitation range

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 1 of 17

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Caprock Services, LLC

Date Reported: 5/9/2019 Client Sample ID: V1@9' R

Project: Legacy San Simon		С	ollectio	on Date:	4/30/2	019 1:30:00 PM
Lab ID: 1905111-002	Matrix: SOIL	ŀ	Receiv	ed Date:	5/2/20	19 10:30:00 AM
Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst: JME
Diesel Range Organics (DRO)	4800	100		mg/Kg	10	5/6/2019 1:57:29 PM
Motor Oil Range Organics (MRO)	1600	500		mg/Kg	10	5/6/2019 1:57:29 PM
Surr: DNOP	0	70-130	S	%Rec	10	5/6/2019 1:57:29 PM
EPA METHOD 8015D: GASOLINE RANGE	E					Analyst: RAA
Gasoline Range Organics (GRO)	1800	24		mg/Kg	5	5/6/2019 7:02:56 PM
Surr: BFB	1180	73.8-119	S	%Rec	5	5/6/2019 7:02:56 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	1.5	0.12		mg/Kg	5	5/6/2019 7:02:56 PM
Toluene	19	0.24		mg/Kg	5	5/6/2019 7:02:56 PM
Ethylbenzene	12	0.24		mg/Kg	5	5/6/2019 7:02:56 PM
Xylenes, Total	58	0.47		mg/Kg	5	5/6/2019 7:02:56 PM
Surr: 4-Bromofluorobenzene	181	80-120	S	%Rec	5	5/6/2019 7:02:56 PM
EPA METHOD 300.0: ANIONS						Analyst: smb
Chloride	ND	59		mg/Kg	20	5/3/2019 6:37:08 PM

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.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

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Page

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Caprock Services, LLC

Project: Legacy San Simon

Date Reported: 5/9/2019 Client Sample ID: V2@3' Collection Date: 4/30/2019 1:40:00 PM

Lab ID: 1905111-003	Matrix: SOIL	Rec	eived Date:	5/2/20)19 10:30:00 AM
Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: JME
Diesel Range Organics (DRO)	5600	97	mg/Kg	10	5/6/2019 2:21:45 PM
Motor Oil Range Organics (MRO)	1700	480	mg/Kg	10	5/6/2019 2:21:45 PM
Surr: DNOP	0	70-130	S %Rec	10	5/6/2019 2:21:45 PM
EPA METHOD 8015D: GASOLINE RANGI	E				Analyst: RAA
Gasoline Range Organics (GRO)	670	240	mg/Kg	50	5/7/2019 9:40:57 PM
Surr: BFB	165	73.8-119	S %Rec	50	5/7/2019 9:40:57 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	1.8	1.2	mg/Kg	50	5/7/2019 9:40:57 PM
Toluene	17	2.4	mg/Kg	50	5/7/2019 9:40:57 PM
Ethylbenzene	14	2.4	mg/Kg	50	5/7/2019 9:40:57 PM
Xylenes, Total	42	4.8	mg/Kg	50	5/7/2019 9:40:57 PM
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	50	5/7/2019 9:40:57 PM

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

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Caprock Services, LLC

Date Reported: 5/9/2019 Client Sample ID: V2@9'R

Project: Legacy San Simon		Co	ollectio	on Date:	4/30/2	019 1:50:00 PM
Lab ID: 1905111-004	Matrix: SOIL	F	Receiv	ed Date:	5/2/20	19 10:30:00 AM
Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS					Analyst: JME
Diesel Range Organics (DRO)	1600	47		mg/Kg	5	5/7/2019 11:06:27 AM
Motor Oil Range Organics (MRO)	480	240		mg/Kg	5	5/7/2019 11:06:27 AM
Surr: DNOP	128	70-130		%Rec	5	5/7/2019 11:06:27 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	200	4.9		mg/Kg	1	5/6/2019 8:13:18 PM
Surr: BFB	1150	73.8-119	S	%Rec	1	5/6/2019 8:13:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	0.031	0.024		mg/Kg	1	5/6/2019 8:13:18 PM
Toluene	0.42	0.049		mg/Kg	1	5/6/2019 8:13:18 PM
Ethylbenzene	0.69	0.049		mg/Kg	1	5/6/2019 8:13:18 PM
Xylenes, Total	3.9	0.098		mg/Kg	1	5/6/2019 8:13:18 PM
Surr: 4-Bromofluorobenzene	147	80-120	S	%Rec	1	5/6/2019 8:13:18 PM

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

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Caprock Services, LLC

Date Reported: 5/9/2019 Client Sample ID: NH-V3@4' Collection Date: 4/30/2019 2:00:00 PM

Project:	Legacy San Simon	on Date:	n Date: 4/30/2019 2:00:00 PM											
Lab ID:	1905111-005	Matrix: SOIL Received Date: 5/2/2019 10:30:00 AM												
Analyses		Result	RL	Qual	Units	DF	Date Analyzed							
EPA ME	THOD 8015M/D: DIESEL RA	NGE ORGANICS					Analyst: JME							
Diesel R	Range Organics (DRO)	2000	97		mg/Kg	10	5/6/2019 2:46:06 PM							
Motor O	il Range Organics (MRO)	1000	490		mg/Kg	10	5/6/2019 2:46:06 PM							
Surr:	DNOP	0	70-130	S	%Rec	10	5/6/2019 2:46:06 PM							
EPA ME	THOD 8015D: GASOLINE R	ANGE					Analyst: RAA							
Gasoline	e Range Organics (GRO)	280	4.8		mg/Kg	1	5/6/2019 8:37:00 PM							
Surr:	BFB	1590	73.8-119	S	%Rec	1	5/6/2019 8:37:00 PM							

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.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

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Caprock Services, LLC

Date Reported: 5/9/2019 Client Sample ID: NH-V3@7' Collection Date: 4/30/2019 2:15:00 PM

Project: Legacy San Simon	Collection Date: 4/30/2019 2:15:00 PM					
Lab ID: 1905111-006	Matrix: SOIL	Received Date: 5/2/2019 10:30:00 AM			19 10:30:00 AM	
Analyses	Result RL Qua		Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS					Analyst: TOM
Diesel Range Organics (DRO)	100	9.7		mg/Kg	1	5/8/2019 1:32:30 PM
Motor Oil Range Organics (MRO)	250	49		mg/Kg	1	5/8/2019 1:32:30 PM
Surr: DNOP	115	70-130		%Rec	1	5/8/2019 1:32:30 PM
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/6/2019 9:00:25 PM
Surr: BFB	122	73.8-119	S	%Rec	1	5/6/2019 9:00:25 PM

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

Qualifiers:

* Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 5/9/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Caprock Services, LLC

1905111-007

Legacy San Simon

Project:

Lab ID:

Client Sample ID: V4@3' Collection Date: 4/30/2019 12:40:00 PM Received Date: 5/2/2019 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst: TOM
Diesel Range Organics (DRO)	520	9.9		mg/Kg	1	5/7/2019 4:51:26 PM
Motor Oil Range Organics (MRO)	180	49		mg/Kg	1	5/7/2019 4:51:26 PM
Surr: DNOP	83.8	70-130		%Rec	1	5/7/2019 4:51:26 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	11	5.0		mg/Kg	1	5/6/2019 10:57:07 PM
Surr: BFB	151	73.8-119	S	%Rec	1	5/6/2019 10:57:07 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	130	60		mg/Kg	20	5/5/2019 3:02:35 PM

Matrix: SOIL

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

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Date Reported: 5/9/2019

Hall Environmental Analysis Laboratory, Inc.

Matrix: SOIL

CLIENT: Caprock Services, LLC

Project: Legacy San Simon

Lab ID: 1905111-008 Client Sample ID: V4@7' Collection Date: 4/30/2019 12:50:00 PM Received Date: 5/2/2019 10:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: TOM
Diesel Range Organics (DRO)	10	9.7	mg/Kg	1	5/7/2019 5:13:35 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/7/2019 5:13:35 PM
Surr: DNOP	90.3	70-130	%Rec	1	5/7/2019 5:13:35 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/6/2019 11:20:46 PM
Surr: BFB	91.1	73.8-119	%Rec	1	5/6/2019 11:20:46 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	140	60	mg/Kg	20	5/5/2019 4:04:39 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/9/2019

CLIENT: Caprock Services, LLC Project: Legacy San Simon	Client Sample ID: SH@3' Collection Date: 4/30/2019 10:30:00 AM					
Lab ID: 1905111-009	Matrix: SOIL Received Date: 5/2/2019 10:30:00 AM					
Analyses	Result RL Qual		al Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst: TOM	
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/7/2019 5:35:50 PM	
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	5/7/2019 5:35:50 PM	
Surr: DNOP	88.0	70-130	%Rec	1	5/7/2019 5:35:50 PM	
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: RAA	
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/6/2019 11:44:18 PM	
Surr: BFB	86.8	73.8-119	%Rec	1	5/6/2019 11:44:18 PM	

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

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Date Reported: 5/9/2019

CLIENT: Caprock Se	ervices, LLC	LC Client Sample ID: SH@6'						
Project: Legacy San	n Simon	Collection Date: 4/30/2019 10:45:00 AM						
Lab ID: 1905111-0	10	Matrix: SOIL Received Date: 5/2/2019 10:30:00 AM						
Analyses		Result RL Qu		Qual Units	DF	Date Analyzed		
EPA METHOD 8015M	//D: DIESEL RANGE	ORGANICS				Analyst: TOM		
Diesel Range Organic	s (DRO)	ND	10	mg/Kg	1	5/7/2019 5:58:09 PM		
Motor Oil Range Orga	nics (MRO)	ND	50	mg/Kg	1	5/7/2019 5:58:09 PM		
Surr: DNOP		87.0	70-130	%Rec	1	5/7/2019 5:58:09 PM		
EPA METHOD 8015	: GASOLINE RANG	E				Analyst: RAA		
Gasoline Range Orgar	nics (GRO)	ND	4.8	mg/Kg	1	5/7/2019 12:07:46 AM		
Surr: BFB		89.3	73.8-119	%Rec	1	5/7/2019 12:07:46 AM		

Hall Environmental Analysis Laboratory, Inc.

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

Qualifiers:

* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 5/9/2019

Hall Environmental Analysis Laboratory, Inc.	
CLIENT: Caprock Services, LLC	Client Sample ID: S

Matrix: SOIL

Project: Legacy San Simon

1905111-011

Lab ID:

Client Sample ID: SH2@3' Collection Date: 4/30/2019 10:15:00 AM Received Date: 5/2/2019 10:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	BANICS				Analyst: TOM
Diesel Range Organics (DRO)	84	9.8	mg/Kg	1	5/7/2019 6:20:31 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/7/2019 6:20:31 PM
Surr: DNOP	91.6	70-130	%Rec	1	5/7/2019 6:20:31 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/7/2019 12:31:05 AM
Surr: BFB	92.3	73.8-119	%Rec	1	5/7/2019 12:31:05 AM

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

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Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/9/2019

CLIENT:	Caprock Services, LLC	Client Sample ID: NH3@6'					
Project:	Legacy San Simon		C	ollectio	on Date:	4/30/2	019 2:30:00 PM
Lab ID:	1905111-012	Matrix: SOIL Received Date: 5/2/2019 10:30:00 AM					19 10:30:00 AM
Analyses		Result RL Qual U		Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: T						Analyst: TOM	
Diesel Range Organics (DRO)		8500	99		mg/Kg	10	5/7/2019 12:26:43 PM
Motor Oil	Range Organics (MRO)	3000	500		mg/Kg	10	5/7/2019 12:26:43 PM
Surr: DNOP		0	70-130	S	%Rec	10	5/7/2019 12:26:43 PM
EPA METHOD 8015D: GASOLINE RANGE Analyst:					Analyst: RAA		
Gasoline Range Organics (GRO)		48	4.9		mg/Kg	1	5/7/2019 12:54:24 AM
Surr: BFB		245	73.8-119	S	%Rec	1	5/7/2019 12:54:24 AM

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

Qualifiers:

*

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н 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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc

WO#:	1905111
	09-May-19

Client:	Caprock	Services, LLC					
Project:	Legacy	San Simon					
Sample ID:	MB-44716	SampType: MBLK	TestCoo	e: EPA Method	1 300.0: Anions		
Client ID:	PBS	Batch ID: 44716	RunN	o: 59642			
Prep Date:	5/3/2019	Analysis Date: 5/3/2019	SeqN	o: 2010555	Units: mg/Kg		
Analyte		Result PQL SPK va	ue SPK Ref Val %	REC LowLimit	HighLimit %I	RPD RPDLimit	Qual
Chloride		ND 1.5					
Sample ID:	ample ID: LCS-44716 SampType: LCS TestCode: EPA Method 300.0: Anions						
Client ID:	LCSS	Batch ID: 44716	RunN	o: 59642			
Prep Date:	5/3/2019	Analysis Date: 5/3/2019	SeqN	o: 2010556	Units: mg/Kg		
Analyte		Result PQL SPK val	ue SPK Ref Val %	REC LowLimit	HighLimit %I	RPD RPDLimit	Qual
Chloride		14 1.5 15.	00 0	95.1 90	110		
Sample ID:	MB-44722	SampType: mblk	TestCoo	e: EPA Method	1 300.0: Anions		
Client ID:	PBS	Batch ID: 44722	RunN	o: 59653			
Prep Date:	5/5/2019	Analysis Date: 5/5/2019	SeqN	o: 2010922	Units: mg/Kg		
Analyte		Result PQL SPK va	ue SPK Ref Val %	REC LowLimit	HighLimit %I	RPD RPDLimit	Qual
Chloride		ND 1.5					
Sample ID:	LCS-44722	SampType: Ics	TestCoo	e: EPA Method	1 300.0: Anions		
Client ID:	LCSS	Batch ID: 44722	Run	o: 59653			
Prep Date:	5/5/2019	Analysis Date: 5/5/2019	SeqN	o: 2010923	Units: mg/Kg		
Analyte		Result PQL SPK val	ue SPK Ref Val %	REC LowLimit	HighLimit %I	RPD RPDLimit	Qual
Chloride		14 1.5 15.	00 00	93.5 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

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QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	1905111

09-May-19

Client:	Caprock	Services, I	LLC								
Project:	Legacy	San Simon									
Sample ID:	MB-44648	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	PBS	Batcl	h ID: 44	648	F	RunNo: 5 9	9657				
Prep Date:	5/3/2019	Analysis D	Date: 5/	6/2019	S	SeqNo: 20	011095	Units: mg/k	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	ND	10								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		9.0		10.00		89.7	70	130			
Sample ID:	LCS-44648	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	LCSS	Batcl	h ID: 44	648	F	RunNo: 5 9	9657				
Prep Date:	5/3/2019	Analysis D	Date: 5/	6/2019	S	SeqNo: 20	011096	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	43	10	50.00	0	85.6	63.9	124			
Surr: DNOP		4.3		5.000		86.1	70	130			
Sample ID:	LCS-44736	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batcl	h ID: 44	736	F	RunNo: 59	9674				
Prep Date:	5/6/2019	Analysis D	Date: 5/	7/2019	S	SeqNo: 20	012068	Units: mg/k	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	48	10	50.00	0	96.9	63.9	124			
Surr: DNOP		4.0		5.000		79.8	70	130			
Sample ID:	MB-44736	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batcl	h ID: 44	736	F	RunNo: 59	9674				
Prep Date:	5/6/2019	Analysis D	Date: 5/	7/2019	S	SeqNo: 20	012069	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	ND	10								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		9.7		10.00		97.0	70	130			
Sample ID:	LCS-44744	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batcl	h ID: 44	744	F	RunNo: 59	9674				
Prep Date:	5/6/2019	Analysis D	Date: 5/	7/2019	S	SeqNo: 20	012775	Units: %Re	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		3.5		5.000		70.1	70	130			

Qualifiers:

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

Caprock Services, LLC

all Environmental Analysis Laboratory, Inc.	

Project:	Legac	y San Simon								
Sample ID:	MB-44744	SampType: I	MBLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	PBS	Batch ID: 4	44744	R	unNo: 5 9	9674				
Prep Date:	5/6/2019	Analysis Date:	5/7/2019	S	SeqNo: 20	012776	Units: %Rec			
Analyte		Result PQI	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		8.6	10.00		86.0	70	130			
Sample ID:	MB-44748	SampType: I	MBLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	PBS	Batch ID:	44748	R	unNo: 59	9713				
Prep Date:	5/6/2019	Analysis Date:	5/7/2019	S	eqNo: 20	013451	Units: %Rec			
Analyte		Result PQI	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		8.1	10.00		81.1	70	130			
Sample ID:	Sample ID: MB-44745 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID:	PBS	Batch ID:	44745	R	unNo: 59	9713				
Prep Date:	5/6/2019	Analysis Date:	5/7/2019	S	eqNo: 20	013457	Units: %Rec			
Analyte		Result PQI	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		11	10.00		106	70	130			
Sample ID: I	_CS-44748	SampType: I	LCS	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	LCSS	Batch ID: 4	44748	R	unNo: 5 9	9713				
Prep Date:	5/6/2019	Analysis Date:	5/7/2019	S	eqNo: 20	013466	Units: %Rec			
Analyte		Result PQI	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		3.4	5.000		68.8	70	130			S
Sample ID: I	_CS-44745	SampType: I	LCS	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	LCSS	Batch ID:	44745	R	unNo: 59	9713				
Prep Date:	5/6/2019	Analysis Date:	5/7/2019	S	GeqNo: 20	013472	Units: %Rec			
Analyte		Result PQI	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.6	5.000		92.4	70	130			

Qualifiers:

Client:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	1905111				
	09-May-19				

Client:	Caprock	Services, LL	С									
Project:	Legacy S	an Simon										
Sample ID: LCS-44701 SampType: LCS					TestCode: EPA Method 8015D: Gasoline Range							
Client ID:	LCSS	Batch IE): 44	701	R	unNo: 5	9659					
Prep Date:	5/2/2019	Analysis Date	e: 5/	6/2019	S	eqNo: 2	011490	Units: mg/K	g			
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range	e Organics (GRO)	23	5.0	25.00	0	92.5	80.1	123				
Surr: BFB		1000		1000		101	73.8	119				
Sample ID:	MB-44701	SampTyp	e: Me	BLK	Test	tCode: El	PA Method	8015D: Gaso	line Rang	e		
Client ID:	PBS	Batch IE): 44	701	RunNo: 59659							
Prep Date:	5/2/2019	Analysis Date	e: 5/	6/2019	S	eqNo: 2	011492	Units: mg/K	g			
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range	e Organics (GRO)	ND	5.0									
Surr: BFB		920		1000		91.8	73.8	119				
Sample ID:	LCS-44717	SampTyp	e: LC	S	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е		
Client ID:	LCSS	Batch ID): 44	717	R	unNo: 5	9700					
Prep Date:	5/3/2019	Analysis Date	e: 5/	7/2019	S	eqNo: 2	012793	Units: %Rec	;			
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB		1100		1000		107	73.8	119				
Sample ID:	Sample ID: MB-44717 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range											
Client ID:	PBS	Batch ID): 44	717	RunNo: 59700							
Prep Date:	5/3/2019	Analysis Date	e: 5/	7/2019	S	eqNo: 2	014337	Units: %Rec	;			
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB		900		1000		90.1	73.8	119				

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

Page 16 of 17

Hall Environmental Analysis Laboratory, Inc.									1703111 00 May 10		
Client: Project:	Caproc Legacy	k Services, I San Simon									09-1149-19
Sample ID:	LCS-44701	SampT	Гуре: LC	S	Tes	tCode: EF	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batcl	h ID: 44	701	F	RunNo: 59	9659				
Prep Date:	5/2/2019	Analysis E	Date: 5/	6/2019	S	SeqNo: 20	011514	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.82	0.025	1.000	0	81.8	80	120			
Toluene		0.85	0.050	1.000	0	84.8	80	120			
Ethylbenzene		0.85	0.050	1.000	0	84.6	80	120			
Xylenes, Total		2.5	0.10	3.000	0	84.8	80	120			
Surr: 4-Brom	nofluorobenzene	0.93		1.000		92.7	80	120			
Sample ID: MB-44701 SampType: MBLK				Tes	tCode: EF	PA Method	8021B: Vola	tiles			
Client ID:	PBS	Batcl	h ID: 44	701	F	RunNo: 5 9	9659				
Prep Date:	5/2/2019	Analysis E	Date: 5/	6/2019	SeqNo: 2011517 Units: mg/Kg						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	nofluorobenzene	0.90		1.000		90.2	80	120			
Sample ID:	LCS-44717	SampT	Type: LC	S	Tes	tCode: EF	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: 44	717	F	RunNo: 59	9700				
Prep Date:	5/3/2019	Analysis E	Date: 5/	7/2019	S	SeqNo: 20	012799	Units: %Re	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	nofluorobenzene	0.97		1.000		97.2	80	120			
Sample ID:	MB-44717	SampT	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batcl	h ID: 44	717	F	RunNo: 5 9	9700				
Prep Date:	5/3/2019	Analysis E	Date: 5/	7/2019	5	SeqNo: 20	012801	Units: %Re	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	nofluorobenzene	0.88		1.000		88.0	80	120			

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

QC SUMMARY REPORT

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 17 of 17

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmen TEL: 505-345-3 Website: www	ntal Analysis Labor 4901 Hawkin Albuquerque, NM 8 975 FAX: 505-345- v.hallenvironmenta	atory 15 NE 17109 San 1.com	Sample Log-In Check List			
Client Name: CAPROCK SERVICES, L	Work Order Num	ber: 1905111		RcptNo	: 1		
Received By: Jevon Campisi	5/2/2019 10:30:00 /	AM	Jun Campui				
Completed By: Victoria Zellar	5/2/2019 3:38:03 Pi	M	Victoria Re	llar ,			
Reviewed By: MM 5-2 -19			Ŷ	labele	d by		
Chain of Custody					JC 5-2		
1. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present			
2. How was the sample delivered?		Courier					
Log In		_		_			
3. Was an attempt made to cool the samples?		Yes 🗹	No	NA 🗌			
4. Were all samples received at a temperature of	of >0° C to 6.0°C	Yes	No 🗹	NA 🗆			
5 0 1 () : () 0		Samples Not	Frozen				
 Sample(s) in proper container(s)? 		Yes ⊻	N0				
6. Sufficient sample volume for indicated test(s)	?	Yes 🗹	No 🗌				
Are samples (except VOA and ONG) properly	preserved?	Yes 🗹	No 🗌				
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗔			
9. VOA vials have zero headspace?		Yes 🗌	No 🗀	No VOA Vials 🗹			
0. Were any sample containers received broker	י?	Yes 🗆	No 🔽	# of preserved			
		_		bottles blecked			
1. Does paperwork match bottle labels?		Yes 🗹	No	for pH:	>12 unless noted)		
 Are matrices correctly identified on Chain of C 	ustody?		No	Adjusted?			
3 Is it clear what analyses were requested?	allouy :	Yes 🔽					
4. Were all holding times able to be met?		Yes 🔽	No 🗆	Checked by:	136 2-2-15		
(If no, notify customer for authorization.)		103 🛄					
Special Handling (if applicable)							
15. Was client notified of all discrepancies with th	nis order?	Yes 🗌	No 🗌	NA 🗹	_		
Person Notified:	Date:						
By Whom:	Via:	eMail 🗌 F	hone 🗌 Fax	In Person			
Regarding:		-					
Client Instructions:							

	Cooler No	Temp ^e C	Condition	Seal Intact	Seal No	Seal Date	Signed By											
	1	-0.6	Good	Yes														
ľ	2	3.6	Good	Yes														
С	Chain-of-Custody Record				Turn-Around Time: 5 day					H	\LL	Eľ	VV	IR	ON	MEI	NTA	L
----------	-------------------------------------	-----------------	--------------------------------------	--------------------------	-------------------------	-----------------------------------	---	------------------	-------	-------	------------	-------------------	------	---------	-------	-----------------	------------	---------
Client:	Capit	rk Se	rvices. LLC	Standard	🗆 Rush		ANALYSIS LABORATORY											
		<u><u>u</u></u>		Project Name	»:	0.	www.hallenvironmental.com											
Mailing	Address:	P.D.	Box 457	Legac	y San	Simon	4901 Hawkins NE - Albuquerque, NM 87109											
1 Dui	nator	NWA I	88260	Project #:			Tel. 505-345-3975 Fax 505-345-4107											
Phone	#:157	5/70	4-278					Analysis Request										
email o	r Fax#:C	aprocks	ervices SL@ gmail.com	Project Manager:			(F)	00				SO4			ent)			
QA/QC	Package:		0	JO	el Low	bry	(802	/ MF	CB's			0 ₄ ,			Abs			
X Star	ndard		Level 4 (Full Validation)					RO	2 P(3	2, P			ent/			
Accred	Accreditation: \Box Az Compliance			Sampler:	lordyne	Taylor	Ę	0/0	/808	1.1	70	2 Z		A)	Pres			
	□ NELAC			Un Ice: # of Coolers:	2 2		BE /	GR	ides	od 5(stals	40 ₃ ,		-00	Lm (
	T (Type)			Cooler Temp	(including CF): -O	.6°c/3.6°C	M	15D	estic	etho	S Me	۲. ۲.	(OA)	emi	olifo			
										N (S	RA 8	ш ц	2	0 (S	alC			
Data	Time	Matrix	Sample Name	Type and #	Type	1905111	BTE	(È)	808	ED	RC Z	5	826	827	Tot			
11200	1315	Spil	V104'	4m ohss	ICE	-001	X	×				X						
1	1330	1	VIQ9'R	1 Negler		-008	X	1				X						
\vdash	1340		V2@3'			-003	X											
	1350	-	V2@9'R	8. ×		-004	X											
	1400		NH- V3@ 4'			-005									·			
	1415		NH- V3@ 7'			-0000												
	1240		V4@3'			-007						X						
	1250		V4@71			-008						X						<u></u>
	1030		SHO3'			-009												
	1044		SHQ 6'			-010										$ \rightarrow $		
	IOK		SH2@3'			-011												
	1430 NH3@6'					-012												
Date:	Date: Time: Relinquished by:		Receive by:	Via:	Date Time	Rer	mark	s: P	lease	een	nail	re	25u	Its t	σž			
5-1-19	5-1-19 1445 Joralyce Jaylan		Kp.		5/1/19 144	ور کے	ello	lo	pra	envi	ron	nen	tal.	Com	•			
Date:	Pate: Time: Relinquished by:		Received by: Via: Courrier Date Time			jordyne.caprockservices@gmail.com												
5/1/19	190	K		M		3-2-17								<u></u>			ol roo ort	

it is a subcontracted to Holl Environmental may be subcontracted to other accredited laboratories.	This serves as notice of this possibility.	Any sub-contracted data will be cleany	notated on the analytical report.
If necessary, samples submitted to Hair Environmental may be been a state of the	A CARLES AND A CAR		



May 24, 2019

JOEL LOWRY CAPROCK SERVICES P.O. BOX 457 LOVINGTON, NM 88260

RE: SAN SIMON 6

Enclosed are the results of analyses for samples received by the laboratory on 05/17/19 12:34.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5
Method EPA 524.2	Total Trihalomethanes (TTHM
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260	Project: Project Number: Project Manager: Fax To:	SAN SIMON 6 NONE GIVEN JOEL LOWRY	Reported: 24-May-19 14:49
---	--	---	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB NH @ 3'	H901797-01	Soil	13-May-19 13:15	17-May-19 12:34
SB NH @ 6'	H901797-02	Soil	13-May-19 13:30	17-May-19 12:34
SB-1 @ 18'	H901797-03	Soil	13-May-19 11:25	17-May-19 12:34
SB-1 @ 24'	H901797-04	Soil	13-May-19 11:30	17-May-19 12:34
SB-2 @ 12'	H901797-05	Soil	13-May-19 11:00	17-May-19 12:34
SB-2 @ 15'	H901797-06	Soil	13-May-19 11:05	17-May-19 12:34
SB-3 @ 9'	H901797-07	Soil	13-May-19 10:20	17-May-19 12:34
SB-3 @ 12'	H901797-08	Soil	13-May-19 10:25	17-May-19 12:34

Joel added chloride to sample 05 and 07 on 05/22/19. This is the revised report and will replace the one sent on 05/22/19.

Cardinal Laboratories

*=Accredited Analyte

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Celeg D. Keine



CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260		Project Num Project Nana Project Mana Fax	I SIMON 6 Ne given 'L Lowry		Reported: 24-May-19 14:49					
			SB H9017	NH @ 3 797-01 (Se	' pil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories					
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
DRO >C10-C28*	963		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
EXT DRO >C28-C36	240		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
Surrogate: 1-Chlorooctane			83.9 %	41-	142	9051716	MS	20-May-19	8015B	
Surrogate: 1-Chlorooctadecane			111 %	37.6	-147	9051716	MS	20-May-19	8015B	

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CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260			Project: SAN SIMON 6 Project Number: NONE GIVEN Project Manager: JOEL LOWRY Fax To:					Reported: 24-May-19 14:49				
			SB H901	NH @ 6 797-02 (Se	, pil)							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
			Cardina	l Labora	tories							
Petroleum Hydrocarbons by (GC FID											
GRO C6-C10*	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B			
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B			
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B			
Surrogate: 1-Chlorooctane			86.8 %	41-	142	9051716	MS	20-May-19	8015B			
Surrogate: 1-Chlorooctadecane			88.7 %	37.6	-147	9051716	MS	20-May-19	8015B			

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CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260			Project: SAN SIMON 6 Project Number: NONE GIVEN Project Manager: JOEL LOWRY Fax To:						Reported: 24-May-19 14:49			
			SB	-1 @ 18'								
			H9017	797-03 (Se	oil)							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
			Cardina	l Laborat	tories							
Inorganic Compounds												
Chloride	48.0		16.0	mg/kg	4	9052122	AC	21-May-19	4500-Cl-B			
Petroleum Hydrocarbons by G	C FID											
GRO C6-C10*	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B			
DRO >C10-C28*	64.3		10.0	mg/kg	1	9051716	MS	20-May-19	8015B			
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B			
Surrogate: 1-Chlorooctane			83.0 %	41-	142	9051716	MS	20-May-19	8015B			
Surrogate: 1-Chlorooctadecane			87.1 %	37.6	-147	9051716	MS	20-May-19	8015B			

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CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260	Reported: 24-May-19 14:49									
			SB H9017	8-1 @ 24' 797-04 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Petroleum Hydrocarbons by G	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
DRO >C10-C28*	18.3		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
Surrogate: 1-Chlorooctane			90.8 %	41-	142	9051716	MS	20-May-19	8015B	
Surrogate: 1-Chlorooctadecane			94.1 %	37.6	-147	9051716	MS	20-Mav-19	8015B	

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*=Accredited Analyte

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CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260	2	Reported: 24-May-19 14:49								
			SB H901	-2 @ 12' 797-05 (Se	oil)					
			Reporting		,					
Analyte	Result	MDL	Ĺimit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	9052207	AC	24-May-19	4500-Cl-B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
DRO >C10-C28*	45.4		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
Surrogate: 1-Chlorooctane			83.2 %	41-	142	9051716	MS	20-May-19	8015B	
Surrogate: 1-Chlorooctadecane			87.1 %	37.6	-147	9051716	MS	20-May-19	8015B	

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CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260		Reported: 24-May-19 14:49								
			SB H901	8-2 @ 15' 797-06 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories					
Petroleum Hydrocarbons by (GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
DRO >C10-C28*	21.6		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
Surrogate: 1-Chlorooctane			79.2 %	41-	142	9051716	MS	20-May-19	8015B	
Surrogate: 1-Chlorooctadecane			86.6 %	37.6	-147	9051716	MS	20-May-19	8015B	

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CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260			Proj Project Num Project Mana Fax		2	Reported: 4-May-19 14:	:49			
			SI	B-3 @ 9'						
			H901'	797-07 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	9052207	AC	24-May-19	4500-Cl-B	
Petroleum Hydrocarbons by G	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
DRO >C10-C28*	10.7		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B	
Surrogate: 1-Chlorooctane	94.5 %	41-	142	9051716	MS	20-May-19	8015B			
Surrogate: 1-Chlorooctadecane			102 %	MS	20-Mav-19	8015B				

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CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260		Project: SAN SIMON 6 Project Number: NONE GIVEN Project Manager: JOEL LOWRY Fax To:							Reported: 24-May-19 14:49				
			SB H901'	3-3 @ 12' 797-08 (Se	oil)								
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
			Cardina	l Laborat	ories								
Petroleum Hydrocarbons by G	GC FID												
GRO C6-C10*	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B				
DRO >C10-C28*	14.5		10.0	mg/kg	1	9051716	MS	20-May-19	8015B				
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9051716	MS	20-May-19	8015B				
Surrogate: 1-Chlorooctane			94.2 %	41-	142	9051716	MS	20-May-19	8015B				
Surrogate: 1-Chlorooctadecane		101 % 37.6-147 9051716						20-Mav-19	8015B				

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICESProject:SAN SIMON 6P.O. BOX 457Project Number:NONE GIVENLOVINGTON NM, 88260Project Manager:JOEL LOWRYFax To:Fax To:Fax To:	Reported: 24-May-19 14:49
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Inorganic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 9052122 - 1:4 DI Water										
Blank (9052122-BLK1)				Prepared &	Analyzed:	21-May-19	9			
Chloride	ND	16.0	mg/kg							
LCS (9052122-BS1)				Prepared &	z Analyzed:	21-May-19	9			
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (9052122-BSD1)				Prepared &	Analyzed:	21-May-19	9			
Chloride	400	16.0	mg/kg	400		100	80-120	3.92	20	
Batch 9052207 - 1:4 DI Water										
Blank (9052207-BLK1)				Prepared &	z Analyzed:	22-May-19	9			
Chloride	ND	16.0	mg/kg							
LCS (9052207-BS1)				Prepared &	Analyzed:	22-May-19	9			
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (9052207-BSD1)				Prepared &	Analyzed:	22-May-19	9			
Chloride	400	16.0	mg/kg	400		100	80-120	7.69	20	

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Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260		F Project Ne Project Ma F	roject: SAN SIMON 6 Reported: Jumber: NONE GIVEN 24-May-19 14 nager: JOEL LOWRY Fax To:							
	Petroleum	Hydrocarb Cardii	ons by G nal Lab	GC FID - Q oratories	Quality C	ontrol				
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 9051716 - General Prep -	Organics									

Blank (9051716-BLK1)				Prepared: 17-Ma	y-19 Analyzed:	20-May-19			
GRO C6-C10	ND	10.0	mg/kg						
DRO >C10-C28	ND	10.0	mg/kg						
EXT DRO >C28-C36	ND	10.0	mg/kg						
Surrogate: 1-Chlorooctane	47.7		mg/kg	50.0	95.4	41-142			
Surrogate: 1-Chlorooctadecane	49.8		mg/kg	50.0	99.7	37.6-147			
LCS (9051716-BS1)				Prepared: 17-Ma	y-19 Analyzed: 2	21-May-19			
GRO C6-C10	200	10.0	mg/kg	200	100	76.5-133			
DRO >C10-C28	217	10.0	mg/kg	200	108	72.9-138			
Total TPH C6-C28	417	10.0	mg/kg	400	104	78-132			
Surrogate: 1-Chlorooctane	54.9		mg/kg	50.0	110	41-142			
Surrogate: 1-Chlorooctadecane	51.6		mg/kg	50.0	103	37.6-147			
LCS Dup (9051716-BSD1)				Prepared: 17-Ma	y-19 Analyzed:	21-May-19			
GRO C6-C10	212	10.0	mg/kg	200	106	76.5-133	5.88	20.6	
DRO >C10-C28	232	10.0	mg/kg	200	116	72.9-138	6.82	20.6	
Total TPH C6-C28	445	10.0	mg/kg	400	111	78-132	6.37	18	
Surrogate: 1-Chlorooctane	59.2		mg/kg	50.0	118	41-142			
Surrogate: 1-Chlorooctadecane	53.0		mg/kg	50.0	106	37.6-147			

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Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

 RPD
 Relative Percent Difference

 **
 Samples not received at proper temperature of 6°C or below.

 Insufficient time to reach temperature.
 - Chloride by SM4500Cl-B does not require samples be received at or below 6°C
 Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keine

Taboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Project Name: San Simon 6 Company Name: Project Location: Project Manager: Relinquished By: L 6LIO6H Sampler Name: Project Owner: Phone #: Address: analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, Relinguished By: EASE NOTE: Liability and Damages. FOR LAB USE ONLY iates or successors arising out of or related to the perfe Lab I.D. 2 STUD 6 PO 896, Lovington, NM 88260 d 121 02-285 5B-30a' 18-3012 38-1024' 30-10101 PENH OU 101 East Marland, Hobbs, NM 88240 20 H N 82 (575) 393-2326 FAX (575) 393-2476 Joel Lowry Diamondback Energy Lea Co, NM Legacy Reserves Joel Lowry Cardinal's liability and client's exclusive remedy for any clain Sample I.D. 17:34 Date: Time: Fax #: Time: services hereunder by Date: e (G)RAB OR (C)OMP Received By: Zec # CONTAINERS * arising whether based in contract or tort, shall be limited to the amount paid by the client for the eived By GROUNDWATER WASTEWATER MATRIX SOIL 1 OIL SLUDGE P.O. #: Attn: Caprock Services OTHER : Company: PRESERV. ACID/BASE: upon any of the above stated ICE / COOL 6 BILL OTHER : Steve Taylor 5/13/14 DATE SAMPLING 10 easons or otherwise. 11:00 11:39 11:05 11:25 1:20 1:15 Phone Result: Fax Result: REMARKS: 10:20 10:25 TIME ~ XX TPH 8015 M. Ext (New Mexico) × Y Chloride 4500 CI-B Yes BTEX 8021 No **TPH TX 1005** Add'I Phone #: Add'I Fax #: ANALYSIS REQUEST Chlori lstruli9 \times × de ad RUSH

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

Sampler - UPS - Bus - Other:

3.30

p#q

Sample Condition Cool Intact Yes Yes No No No

CHECKED BY:

URIVI-UUG R Z.



May 22, 2019

JOEL LOWRY CAPROCK SERVICES P.O. BOX 457 LOVINGTON, NM 88260

RE: SAN SIMON BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/14/19 13:48.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260	Pr Pro	Project: SAN SIMON BATTERY Project Number: NONE GIVEN Project Manager: JOEL LOWRY Fax To:		Reported: 22-May-19 17:29
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB 3 @ 24'	H901746-01	Soil	13-May-19 10:50	14-May-19 13:48
SB 2 @ 30'	H901746-02	Soil	13-May-19 11:20	14-May-19 13:48
SB 1 @ 36'	H901746-03	Soil	13-May-19 11:45	14-May-19 13:48

Joel added BTEX and Chloride to the samples on 05/16/19. This is the revised report and will replace the one sent on 05/15/19.

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260		Project: SAN SIMON BATTERY Project Number: NONE GIVEN Project Manager: JOEL LOWRY Fax To:							Reported: 2-May-19 17	29
			SB H9017	3 @ 24' 746-01 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	<16.0		16.0	mg/kg	4	9051703	AC	22-May-19	4500-Cl-B	
Volatile Organic Compounds h	oy EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9051701	ms	17-May-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9051701	ms	17-May-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9051701	ms	17-May-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9051701	ms	17-May-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9051701	ms	17-May-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			95.9 %	73.3	-129	9051701	ms	17-May-19	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9051409	MS	15-May-19	8015B	
DRO >C10-C28*	10.4		10.0	mg/kg	1	9051409	MS	15-May-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9051409	MS	15-May-19	8015B	
Surrogate: 1-Chlorooctane			97.9 %	41-	142	9051409	MS	15-May-19	8015B	
Surrogate: 1-Chlorooctadecane			106 %	37.6	-147	9051409	MS	15-May-19	8015B	

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Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260	Project: SAN SIMON BATTERY F Project Number: NONE GIVEN 22-I Project Manager: JOEL LOWRY Fax To:							Reported: 2-May-19 17:	29	
			SB	2 @ 30'	.;])					
			H901	40-02 (50)11)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	<16.0		16.0	mg/kg	4	9051703	AC	22-May-19	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9051701	ms	17-May-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9051701	ms	17-May-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9051701	ms	17-May-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9051701	ms	17-May-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9051701	ms	17-May-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			95.7 %	73.3-	-129	9051701	ms	17-May-19	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9051409	MS	15-May-19	8015B	
DRO >C10-C28*	32.6		10.0	mg/kg	1	9051409	MS	15-May-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9051409	MS	15-May-19	8015B	
Surrogate: 1-Chlorooctane			97.3 %	41-	142	9051409	MS	15-May-19	8015B	
Surrogate: 1-Chlorooctadecane			103 %	37.6-	-147	9051409	MS	15-May-19	8015B	

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Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260	Project: SAN SIMON BATTERY Project Number: NONE GIVEN Project Manager: JOEL LOWRY Fax To:							Reported: 22-May-19 17:29		
			SB H9012	1 @ 36' 746-03 (So	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	<16.0		16.0	mg/kg	4	9051703	AC	22-May-19	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9051701	ms	17-May-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9051701	ms	17-May-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9051701	ms	17-May-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9051701	ms	17-May-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9051701	ms	17-May-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			95.4 %	73.3	-129	9051701	ms	17-May-19	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9051409	MS	15-May-19	8015B	
DRO >C10-C28*	22.6		10.0	mg/kg	1	9051409	MS	15-May-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9051409	MS	15-May-19	8015B	
Surrogate: 1-Chlorooctane			94.8 %	41-	142	9051409	MS	15-May-19	8015B	
Surrogate: 1-Chlorooctadecane			102 %	37.6	-147	9051409	MS	15-May-19	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260	Project: Project Number: Project Manager: Fax To:	SAN SIMON BATTERY NONE GIVEN JOEL LOWRY	Reported: 22-May-19 17:29

Inorganic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 9051703 - 1:4 DI Water										
Blank (9051703-BLK1)				Prepared &	Analyzed:	17-May-19				
Chloride	ND	16.0	mg/kg							
LCS (9051703-BS1)				Prepared &	Analyzed:	17-May-19				
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (9051703-BSD1)		Prepared & Analyzed: 17-May-19								
Chloride	400	16.0	mg/kg	400		100	80-120	3.92	20	

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CAPROCK SERVICESProject:SAN SIMON BATTERYP.O. BOX 457Project Number:NONE GIVENLOVINGTON NM, 88260Project Manager:JOEL LOWRYFax To:	Reported: 22-May-19 17:29
--	------------------------------

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting	T T 1	Spike	Source	MARC	%REC		RPD	N
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 9051701 - Volatiles										
Blank (9051701-BLK1)				Prepared &	Analyzed:	17-May-19	9			
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0982		mg/kg	0.100		98.2	73.3-129			
LCS (9051701-BS1)				Prepared &	z Analyzed:	17-May-19	9			
Benzene	1.98	0.050	mg/kg	2.00		98.9	72.2-131			
Toluene	2.14	0.050	mg/kg	2.00		107	71.7-126			
Ethylbenzene	2.05	0.050	mg/kg	2.00		103	68.9-126			
Total Xylenes	6.18	0.150	mg/kg	6.00		103	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0962		mg/kg	0.100		96.2	73.3-129			
LCS Dup (9051701-BSD1)				Prepared &	analyzed:	17-May-19	9			
Benzene	1.97	0.050	mg/kg	2.00		98.5	72.2-131	0.479	6.91	
Toluene	2.11	0.050	mg/kg	2.00		106	71.7-126	1.37	7.12	
Ethylbenzene	2.04	0.050	mg/kg	2.00		102	68.9-126	0.643	7.88	
Total Xylenes	6.18	0.150	mg/kg	6.00		103	71.4-125	0.0911	7.46	
Surrogate: 4-Bromofluorobenzene (PID)	0.0947		mg/kg	0.100		94.7	73.3-129			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



CAPROCK SERVICES P.O. BOX 457 LOVINGTON NM, 88260	Project: Project Number: Project Manager: Fax To:	SAN SIMON BATTERY NONE GIVEN JOEL LOWRY	Reported: 22-May-19 17:29
---	--	---	------------------------------

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

	D li	Reporting	TT 1 .	Spike	Source	N/DEC	%REC	0.00	RPD	N T - 1
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 9051409 - General Prep - Organics										
Blank (9051409-BLK1)				Prepared: 1	14-May-19	Analyzed:	15-May-19			
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	50.1		mg/kg	50.0		100	41-142			
Surrogate: 1-Chlorooctadecane	53.2		mg/kg	50.0		106	37.6-147			
LCS (9051409-BS1)				Prepared &	Analyzed:	14-May-1	9			
GRO C6-C10	206	10.0	mg/kg	200		103	76.5-133			
DRO >C10-C28	206	10.0	mg/kg	200		103	72.9-138			
Total TPH C6-C28	412	10.0	mg/kg	400		103	78-132			
Surrogate: 1-Chlorooctane	56.2		mg/kg	50.0		112	41-142			
Surrogate: 1-Chlorooctadecane	57.9		mg/kg	50.0		116	37.6-147			
LCS Dup (9051409-BSD1)				Prepared: 1	14-May-19	Analyzed:	15-May-19			
GRO C6-C10	206	10.0	mg/kg	200		103	76.5-133	0.00242	20.6	
DRO >C10-C28	196	10.0	mg/kg	200		98.2	72.9-138	4.87	20.6	
Total TPH C6-C28	403	10.0	mg/kg	400		101	78-132	2.41	18	
Surrogate: 1-Chlorooctane	58.3		mg/kg	50.0		117	41-142			
Surrogate: 1-Chlorooctadecane	57.5		mg/kg	50.0		115	37.6-147			

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

 RPD
 Relative Percent Difference

 **
 Samples not received at proper temperature of 6°C or below.

 Insufficient time to reach temperature.
 - Chloride by SM4500Cl-B does not require samples be received at or below 6°C
 Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whitstoewer shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based to reproduced except in full with written approval of Cardinal Lobarotories.

Celey D. Keine

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Labo	Ра
DIN	

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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Sampler - UPS -		Relinquished By:	Renard	Relinquished By:	affiliates or successors arising ou	PLEASE NOTE: Liability and D. analyses. All claims including th					0	25	2.	7 6	Lab I.D. H9017 46	FOR LAB USE ONLY	Sampler Name:	Project Location:	Project Name:	Project Owner:	Phone #:		Address: 303 W	Project Manager:	Company Name:
Circle One) Bus - Other:			- Jonhor	1	al be liable for incidental or conseq ut of or related to the performance of	amages. Cardinal's liability and clier ose for negligence and any other c					15 m 1 91	26 2 C 20		15 0 2AS	Sample I.		Jordyne Taylor	Lea	an Simon	Legacy Reserves O			. Wall St. Midland, TX	Joel Lowry	Legacy Reserves O
- 6-90	Time:	Date:	Time:	Date: S-H13	rental damages, including w If services hereunder by Car	t's exclusive remedy for any use whatsoever shall be de									~ <u>D</u>				Batter	perating, LP	Fax #:		79701		perating, LP
Sample Condit Cool Intact Pres Pres No No N		Received By:	Junara	Received By:	vithout limitation, business interruptions, lo: dinal, regardless of whether such claim is	claim arising whether based in contract o emed waived unless made in writing and r						(G) /		R X	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	MATRIX		U	Ś						
on CHECKED BY: (Initials) o TC		`	Uldatstal	01111	ss of use, or loss of profits incurred by client based upon any of the above stated reason	r tort, shall be limited to the amount paid by received by Cardinal within 30 days after con					× 5-13-17	× 5-15-19		x <12-12-19	OTHER : ACID/BASE: ICE / COOL OTHER :	PRESERV, SAMPLI	Steve Tau	Attn:			, HC	Carrock Ser	Company:	P.O. #:	BILL TO
			REMARKS:	Phone Result Fax Result:	t, its subsidiaries, ns or otherwise.	the client for the mpletion of the applica					241		1000	Inso :	TIME	KG	1 or					INIONS.			
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rvices@gmail.	mental.com			Add'l Phone #: Add'l Fax #:																					ANALYSIS
.com														_			2 2.22 200						N.		REQUEST
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† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476



May 31, 2019

JOEL LOWRY CAPROCK SERVICES P.O. BOX 457 LOVINGTON, NM 88260

RE: SAN SIMON BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/29/19 11:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



CAPROCK SERVICES JOEL LOWRY P.O. BOX 457 LOVINGTON NM, 88260 Fax To:

Received:	05/29/2019	Sampling Date:	05/24/2019
Reported:	05/31/2019	Sampling Type:	Soil
Project Name:	SAN SIMON BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY RESERVES OP LEA CO NM		

Sample ID: NH 1C @ SURFACE (H901880-01)

TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/29/2019	ND	200	99.8	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/29/2019	ND	208	104	200	4.22	
EXT DRO >C28-C36	<10.0	10.0	05/29/2019	ND					
Surrogate: 1-Chlorooctane	74.0 9	% 41-142							
Surrogate: 1-Chlorooctadecane	72.6 %	37.6-14	7						

Sample ID: NH 1C @ (H901880-02)

TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/29/2019	ND	200	99.8	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/29/2019	ND	208	104	200	4.22	
EXT DRO >C28-C36	<10.0	10.0	05/29/2019	ND					
Surrogate: 1-Chlorooctane	88.2	% 41-142							
Surrogate: 1-Chlorooctadecane	87.2	% 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

t jo t eged	A DO LA LO LI C A DO LA LO LI C 101 East Marland, Hobbs, NM 88 (575) 393-2326 FAX (575) 393-2 (575) 393-2326 FAX (575) 393-2 Legacy Reserves Operating, LP Legacy Reserves Operating, LP	47 B ID –	P.O. #				AND AN	ALYSIS RE	
Address: 303	W. Wall St. Midland, TX 79701		P.O. #: Company:				12		
Phone #: Project Owner:	Fax #: Legacy Reserves Operating, LP		CapackSen	Mexico) B					
Project Name: Project Location	: Lea	sterry	Attn:	(New 1	8021	X 1005			SH
Sampler Name:	Jordyne Taylor		Steve Taula	Y. Ex	BTEX	РН Т)			RUS
FOR LAB USE ONLY		C)OMP. RS ITER ER MATRIX	PRESERV. SAMPLING	TPH 8015 I	E	TF			
Lab I.D.	Sample I.D.	 (G)RAB OR (C) # CONTAINER GROUNDWATI WASTEWATER SOIL OIL SLUDGE 	OTHER : ACID/BASE: ICE / COOL OTHER :	T	1)			
2-19	NHICE OWT.	8 9 X 7	X 61-14-19 X	X X					
		×	× 5-94-19 10	× 10					
Lease NOTE: Liability and	Damanes. Cardinal's lishifiky and client's evolutions around the co								
service. In no event shall Can ifiliates of successors arising Relinquished By:	Indes for negligence and any other cause whatsoewer shall be d Jinat be liable for incidental or consequental damages, including out of or related to the performance of services hereunder by c.	eerned waived unless made in writing and re without limitation, business interruptions, loss ardinal, regardless of whether such claim is b Received By:	ceived by Cardinal within 30 days after completio of use, or loss of profits incurred by client, its sub assed upon any of the above stated reasons or do	in of the applicable bidiaries, herwise.	5				
Refinquished By	Current Control Contro	Received By:	REAL PROPERTY OF THE PARTY OF T	ine result:			dd'l Phone # dd'l Fax #:	and other	
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FORM BOG R 2	-d. Ne		70						

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† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

Attachment #7 Photographic Log



Figure 1 View of surface staining from the initial release, facing South.



Figure 2 View of surface staining from the initial release, facing Southwest.



Figure 3 View of surface staining from the initial release, facing Southeast.





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Figure 5 View of delineation activities, facing Southwest.
```



Attachment #8 Release Notification (FORM C-141)
District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District Office **In the future, please leave this section blank. Much appreciated Incident ID pendingAB1912958012 District RP pending1RP-5475 Facility ID pending

Application ID

per AB1912957391

Release Notification

Responsible Party

Responsibly Party	Legacy Reserves Operating, LP	OGRID	240974	···
Contact Name	Brian Cunningham	Contact Telephone	432-234-9450	
Contact Email	bcunningham@legacylp.com	Incident # (assigned by OCD)		
Contact Mailing Address	303 W. Wall St. Midland, TX 7970)1	······	

Location of Release Source

Latitude		32.422908		Longitude	-103.400565	
			(Nad 83 in dec.	imal degrees to 5 decimal places)		
Site Name	San Simon	6 State Battery **		Site Type	Tank Battery	
Date Release	Discovered	04/08/19		API# (if applicable) N/A	30-025-26949**	
					AB	
Unit Letter	Section	Township	Range	County		
** "H"	6	228	35E	Lea		
Surface Owne	r: 🗹 State	Federal Tr	ibal 🗌 Private (1	Name)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

		<u> </u>
Crude Oil	Volume Released (bbls) 157	Volume Recovered (bbls) 0
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	✓ Yes □ No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		
The release was attribu	ited to a hole developing in the oil storage tank.	

Form C-141
Page 2

State of New Mexico Oil Conservation Division

Incident ID	pendingNAB1912958012
District RP	pending1RP-5475
Facility ID	pending
Application ID	pendingbAB1912957391

Was this a major release as defined by 19.15.29.7(A) NMAC? Yes No	If YES, for what reason(s) does the responsible party consider this a major release? Greater than 25 bbls.
If YES, was immediate r	notice given to the OCD? By whom? To whom? When and by what means? (phone, email, etc)?
Yes, Clyde Wilhoit, Ji	m Griswold/NMOCD District 1 Spills, 4/8/2019 @ 5:20, Phone Message

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

\checkmark The source of the release has been stopped.	
The impacted area has been secured to protect	human health and the environment.
Release materials have been contained via the	use of berms or dikes, absorbent pads, or other containment devices.
All free liquids and recoverable materials have	been removed and managed appropriately.
If all the actions described above have <u>not</u> been un	lertaken, explain why:
Per 10 15 20 8 B (4) NMAC the responsible parts	
begun, please attach a narrative of actions to date.	may commence remediation immediately after discovery of a release. If remediation has fremedial efforts have been successfully completed or if the release occurred within a
lined containment area (see 19.15.29.11 (A)(5)(a)	IMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true	and complete to the best of my knowledge and understand that pursuant to OCD rules and
regulations all operators are required to report and/or f	e certain release notifications and perform corrective actions for releases which may endanger
failed to adequately investigate and remediate contamin	-141 report by the OCD does not relieve the operator of liability should their operations have
addition, OCD acceptance of a C-141 report does not r	lieve the operator of responsibility for compliance with any other federal, state, or local laws
and/or regulations.	
Printed Name: Clyde Wilholt	Title: Maintenance Foreman
Signature: Cycle Wilkort	Date: <u>4-11-19</u>
email: cwilhoit@legacylp.com	Telephone: 432-425-4137
OCD Only	
Received by Anglin Lito mante	
Account of Annung Strent theme	Date: 5/9/2019

Attachment #9 Field Data

Site Name: San Simon

SAMPLE LOG

Date: 4/9/19 + 4/30/19

Sample ID	Latitude	Longitude	Chloride	Odor	
VI@ 6"	32.42259	-103.40082	1,280	Strong	
VI@12"R	- 11	1)	-	Strong	
V2@6"	32.42270	-103.40079	32.0	Strong	
V2@12"R	16			5+10-5	
V3@6"R	32.42278	-103.40080	<16.0	Strong	
NH@ 3-6"R	32.42279	-103,40082	32.0	Light	
WH2@3-6"	32.42271	-103,40084	<16.D	None	
WH2013 R	41		<16.0	Nove	
WH1(03-6"	32.47241	-103.40080	216.0	Nove	
WHICO TO R	"		<16.0	Nore	
2H103-6 K	32.42641	-103.40080	48.0	Inere	
EH 203-6 K	32.90075	-103,400.7.7	48.0	Nove	
V403-6K	32.46250	-107.90077	1500	strong	
SH(03-6K	32.97242	-103.40074	40.0	Nove	
EH3 (03-6 K	32.47251	-103.40040	27.60	lose	
NH 403-6 12	32.42255	-103.40072	200	Nove	
WH 303-6 K	32.011.50	-105 40078	32.0	Now	
VIQU	21 1120 09	103 40082		1000101	TPH RIE (1-
VIQAIR	20.70251	- 103. 10003	8012	heavy	137E1 C1-
VD@Z'	27 47770	-103,40079		heavy	BIEN
VIQQIR	54.70010		<108	heave	BIFX
NH-V3@4'	32 42078	- 103.40080		Light	
NH-V3@7'	11	11	<108	-	
V4@3'	32,42254	- 103. 40076	-	moderat	e cit
V4@7'		1 \	136	-	C17
SH@3'	32.42245	- 103.46076	-	Light	
SHQU	λι	<u> </u>	<108	~	
SH2@3'	32.422.42	-103.40079	<108	-	
NH3@ 6	32.42282	-103.40083	<108	-	
	20 110000	100 /100 CI			
NHICO Surt.	52. 42289	-103.40001		None	
NHICO 14"			-	None	
68-1010	37 47753		(100		
20-10-010		-103.90089		Vilight	
50-10-24	•			10000	
20.16.30				VVCigur	
48.20121	37 42245	-103.40081	1109.	Vilient	
10-2016'	11	1		NALA	
6R-7 020'		••	4	VVILLE	
10 0 - 30				an milter	
58.309'	32. 47272	-103.40081	6108	V. Liet	
53-3012'		••	4	V.V.LiL	r
58-3024'	*	••	•4	None	

FIELD NOTES

Site Name: San Simon 4 TB

Date: 4/9/2019



Conduct initial investigation

12 the	4F	10	delineate	Sike.	Hand	Rode!	0	10-10"
Need	Bac	lino	e				C	

Field ID	Odor/PID	Chloride
		0.0

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride

FIELD NOTES

Site Name: San Simon le State

Date: 4/30/2019



Cut deliveration Trenches w/ backbop Returned @9', Need to Prill

Field ID	Odor/PID	Chloride
VIQU	Strong	
VIDA'R	Strong	6108
)	

Field ID	Odor/PID	Chloride
V203'	Strong	
V2D9'R	Strong	6102
	·)	
)		

Field ID	Odor/PID	Chloride
NH-V3PH	Moderch	_
NH.V3P7'	mideret	2108

Field ID	Odor/PID	Chloride
V403'	Wodercte	-
vup?	Nore	136

Field ID	Odor/PID	Chloride
5403'	6.1ish-	
SHO 6'	Nore	6108
5 17 203'	None	6108
NH 3P6'	Nove	

Odor/PID	Chloride
+	
	Odor/PID

SOIL PROFILE

Site Name: San Sinon 6 State

5B-1

Date: 5/13/19

Description		Denth (ft. has)
Inouched Eill	A	Depth (jt. bys)
East (0, 11)	minin	- 1
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moderate moisture	·····	3
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	J. J. C.	3
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	in the test	36 TP
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		9
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SOIL PROFILE 5B-2

Site Name: San Simon 6 State

Date: 5/13/14

Description		Depth (ft. has)
Imported Fill	000 2000	a 1
	minin	
Reile + Prile		- 2
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Brownish Red Sand	٠٠ _ل ه ۲ ا	1
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VU. Light Odor		8
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Tan Sand Dry		20
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		6
		7
		8
		9
		0

Site Name: San Simon le State

Date: 5/13/19

Description		Depth (ft. has)
Imported Fill Calido	8 2089 8 24	1
	1	
Fuels Dal	-A X	2
Ivarrane 1000	-	3
	manna	4
Resilent Kock Tayer		5
Moderate Odor		6
		7
* المر *		8
		9
	mun	10
Brownish Red Sand		11
		12
WW lidet Adar	······	12
		13
	·	14
		15
	······	16
		17
Tunnish Sand	1	18
		19
		20
		21
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