

Soil Assessment and Remediation Work Plan

Dark Canyon Valve Set Incident ID: NRM2034257903 Talon Project 702958.001.01

Prepared For:

3 Bear Delaware Operating-NM, LLC 1512 Larimer St. Suite 540 Denver, CO 80202

Prepared By:

TALON/LPE 408 W. Texas Avenue Artesia, NM 88210

March 19, 2021

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Mr. Mike Bratcher **NMOCD District 1** 811 S. 1st Street Artesia, NM 88210

Subject: Soil Assessment and Remediation Work Plan Dark Canyon Valve Set Eddy County, New Mexico Incident ID: NRM2034257903

3 Bear Delaware Operating-NM, LLC (3Bear) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The results of our soil assessment and proposed remediation activities are contained herein.

Site Information

The Dark Canyon Valve Set is located approximately Seven (7) miles southeast of Carlsbad, New Mexico. The legal location for this release is Unit Letter A, Section 21, Township 23 South and Range 26 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.296589 North and -104.289958 West. A site plan is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Reagan loam. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Holocene to middle Pleistocene in age and is comprised of alluvium and/or eolian deposits. Drainage courses in this area are well drained Appendix II.

The New Mexico Office of the State Engineer Database indicates the nearest reported depth to groundwater is 265-feet below ground surface (BGS), as referenced in POD (Point of Diversion) record C 01463. POD record C-02522 contains well data indicating the depth to groundwater in 1997 was 304'bgs., as referenced in correspondence from Mr. Travis Glenn. See Appendix II for the referenced groundwater depth.

Pursuant to the NMOCD recommendation: on March 08, 2021 thru the date of March 10, 2021 Talon Drillers advanced a temporary water well to depths of 51' bgs. On March 13, 2021 Talon personnel revisited the well site in order to gauge the depth of the well. The gauge registered at 51.5 ft. and no water was present at the bottom of the well. The temporary well was removed and plugged with Bentonite to surface level.

Site Characterization

Pursuant to Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29 of the New Mexico Administrative Code (NMAC), if a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to the groundwater.

Approximate Depth to	o Groundwater	245 Feet/BGS
□Yes ⊠No	Within 300 feet of any continuously flowing wa any other significant watercourse	tercourse or
□Yes ⊠No	Within 200 feet of any lakebed, sinkhole or pla	ya lake
□Yes ⊠No	Within 300 feet from an occupied permanent reschool, hospital, institution or church	esidence,
∐Yes ⊠No	Within 500 feet of a spring or a private, domes well used by less than five households for dom watering purposes	
☐Yes ⊠No ☐Yes ⊠No	Within 1000 feet of any fresh water well or spri Within incorporated municipal boundaries or w Municipal fresh water well field covered under ordinance adopted pursuant to Section 3-2703	ithin a defined a municipal
☐Yes ⊠No ☐Yes ⊠No ☐Yes ⊠No ☐Yes ⊠No	Within 300 feet of a wetland Within the area overlying a subsurface mine Within an unstable area Within a 100-year floodplain	

This release did not occur within any of these areas and the depth to groundwater exceeds 100-feet BGS. Based upon the analytical data collected for this subsurface investigation, the impacts from this release are below NMOCD remediation closure criteria. However, analytical data indicates chloride concentrations in excess of 600 mg/kg. As such, the upper 4-feet of this area will be restored to levels set forth in Table 1, 19.15.29 NMAC closure criteria. Therefore, the reclamation closure criteria for this site will be as follows:

	Table I Closure Criteria for Soils Impacted by a Release							
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l TDS	Constituent	Method	Limit					
100'-200'	Chloride	EPA 300.0 or SM4500 CI B	600 mg/kg					

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TPI	Η	EPA SW-846	100 mg/kg
(GF	RO+DRO+MRO)	Method 8015M	
BTI	EX	EPA SW-846 Method	50 mg/kg
		8021B or 8260B	
Ber	nzene	EPA SW-846 Method	10 mg/kg
		8021B or 8260B	

Incident Description

According to the C-141: on or about November 20, 2020, due to a pipeline failure approximately 4,000 bbl. of produced water were released onto the right of way. This right of way is part of a high-pressure production zone that traverses adjacent to a county road. The piping has been transported to a laboratory for analysis, in order to determine the mechanism of failure. 3 Bear Energy took proactive environmental protective measure by dispatching a Hydro-vac to recover all free-standing fluid, and by excavating all saturated soil immediately upon discovery. (Appendix I).

Site Assessment

On November 23, 2020, Talon mobilized personnel to begin the site assessment and soil sampling activities. Dirt work completed by others in an effort to remove saturated soils, revealed that the impacted area had been excavated to approximately 4' Bgs. Composite soil samples were collected within and around the impacted area utilizing a hand auger. All soil samples were properly collected, packaged, preserved, and transported to Hall Laboratories for analysis of Chloride analyte (Method EPA 300.0), Results from our initial sampling event are presented in the following data table. A complete laboratory report can be found in Appendix VI.

Sample ID	Depth (ft.)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
С	2'	NT	NT	NT	NT	NT	-	9000
S. SW	2'	NT	NT	NT	NT	NT	-	9000
E. SW-3	2'	NT	NT	NT	NT	NT	-	6100
E. SW-2	4'	ND	ND	ND	ND	ND	0	2700
Α	4'	ND	ND	ND	ND	ND	0	4600
В	4'	ND	ND	ND	ND	ND	0	5000
W. SW	4'	ND	ND	ND	ND	ND	0	260
E. SW-1	4'	ND	ND	ND	ND	ND	0	ND
Source	4'	ND	ND	ND	ND	ND	0	6200
ND= Ana	lyte Not	Detected	NT	= Analyte	e Not Tes	sted C=	=Composi	te

11-23-20 Lab Report

On December 14, 2020, Talon personnel utilized a Reich Air Rotary drill-rig to further vertically delineate those points at which chloride concentrations were still found to be greater than 600 mg/kg. The borings were advanced to the extent that refusal was encountered. The following boring positions were met with refusal B-2, B-4, B-5, B-7, and B-9 thru B-11 due to cobble stone and river rock. The boring extractions were properly analyzed, packaged, preserved, and transported to Hall Laboratories for analyses of Chloride (EPA Method 300.0), BTEX (EPA Method 8021B), and TPH (EPA Method 8015M). The analytical results from this soil boring event are recapped in the table below. The official ab reports can be seen in Appendix VI.

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
		20'	NT	NT	NT	NT	NT	0	6200
B-1	12/14/2020	22'	NT	NT	NT	NT	NT	0	8000
		24' R	NT	NT	NT	NT	NT	0	7200
		20'	NT	NT	NT	NT	NT	0	2900
B-3	12/14/2020	22'	NT	NT	NT	NT	NT	0	5500
		24' R	NT	NT	NT	NT	NT	0	4000
		14'	ND	ND	ND	ND	ND	0	12000
B-6	12/9/2020	16'	NT	NT	NT	NT	NT	0	6800
		18' R	ND	ND	ND	ND	ND	0	6900
		14'	ND	ND	ND	ND	ND	0	7400
B-8	12/9/2020	16'	NT	NT	NT	NT	NT	0	2300
		18'	NT	NT	NT	NT	NT	0	3300
		20' R	ND	ND	ND	10	ND	10	3500
		6'	ND	ND	ND	ND	ND	0	1300
		8'	NT	NT	NT	NT	NT	0	710
	-	10'	NT	NT	NT	NT	NT	0	280
B-12	12/9/2020	12'	NT	NT	NT	NT	NT	0	320
		14'	NT	NT	NT	NT	NT	0	240
		16'	NT	NT	NT	NT	NT	0	200
		18'	NT	NT	NT	NT	NT	0	140
		20' R	ND	ND	ND	ND	ND	0	670
		0-1'	ND	ND	ND	ND	ND	0	ND
E.BG	12/9/2020	4'	NT	NT	NT	NT	NT	0	ND
		10'	NT	NT	NT	NT	NT	0	ND
	ļ	20' R	ND	ND	ND	15	ND	15	ND
		0-1'	ND	ND	ND	ND	ND	0	ND
W.BG	12/9/2020	4'	NT	NT	NT	NT	NT	0	ND
-	, -,	10'	NT	NT	NT	NT	NT	0	ND
		20' R	ND	ND	ND	ND	ND	0	ND
N	ID = Analyte N	lot Detected	NT = Analyte	Not Tested E	3G = Backgrou	und R = Refus	al with Air Ro	otary Drill Rig	

12-16-20 Lab Report

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Proposed Remedial Actions

The following remedial actions are pursuant to email correspondence from Rob Hamlet, NMOCD District 2, dated 12/21/2020, as appended in Appendix V.

The impacted area near the source has been excavated by 3 Bear Energy to a depth of 24' bgs. The remainder of the impacted spill area has been excavated to approximately 14' bgs. All saturated soils have been removed, transported and disposed of at R360, an NMOCD approved facility. Excavation area maps are attached in Appendix I.

Soil samples will be collected approximately every 200 square feet and analyzed for Chlorides, the analyte of concern, confirming the levels left in place. We propose to backfill each day based upon the results of our field chloride titrations to minimize the amount of time personnel are exposed to nearby traffic and avoid potential overnight traffic hazards of an open excavation. Pursuant to the NMOCD recommendation: the excavated areas will be backfilled to 6' bgs. with caliche, followed by a layer of sand to a depth of 8' bgs, a 20 mil. liner seated, followed by native topsoil to surface. The remediated area will be seeded with State Sandy Loam (SL) seed mixture at the prescribed rate pursuant to NMSLO guidelines for the reclaimed surface area.

Closure

Should you have any questions or if further information is required, please do not hesitate to contact our office at 575-746-8768.

Respectfully submitted,

TALON/LPE

Rebecca Pons Project Manager

Attachments:

- Appendix I Site Maps
- Appendix II Soil Survey, Groundwater Data, and Boring Log
- Appendix III Initial C-141
- Appendix IV Photo Documentation
- Appendix V Correspondence
- Appendix VI Laboratory Data



APPENDIX I

SITE MAPS



Legend



 Bore Hole Dark Canyon SWD 🯉 Impact Area/Spill Area

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APPENDIX II

SOIL SURVEY, GROUNDWATER DATA

Eddy Area, New Mexico

RA—Reagan loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w5c Elevation: 1,100 to 4,400 feet Mean annual precipitation: 7 to 14 inches Mean annual air temperature: 60 to 70 degrees F Frost-free period: 200 to 240 days Farmland classification: Farmland of statewide importance

Map Unit Composition

Reagan and similar soils: 98 percent Minor components: 2 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reagan

Setting

Landform: Alluvial fans, fan remnants Landform position (three-dimensional): Rise Down-slope shape: Linear, convex Across-slope shape: Linear Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam *H2 - 8 to 60 inches:* loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: B Ecological site: R042XC007NM - Loamy Map Unit Description: Reagan loam, 0 to 3 percent slopes---Eddy Area, New Mexico

Hydric soil rating: No

Minor Components

Upton

Percent of map unit: 1 percent Ecological site: R042XC025NM - Shallow Hydric soil rating: No

Atoka

Percent of map unit: 1 percent Ecological site: R042XC007NM - Loamy Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 16, Jun 8, 2020



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	been O=or	OD has replace phaned, e file is ed)		••					2=NE (st to lar	3=SW 4=SI gest) (N	E) IAD83 UTM in m	eters)	(In feet)	
	Cod	POD Sub-	C		Q			T	Durg	x	Y	Distance			Water Column
POD Number C 01140	Coa	e basin (C	ED	3 у 64 1					26E	x 566980		Distance 356	325	vvater	Column
C 00341	С	CUB	ED		1	3	22	23S	26E	567090		1001	1881		
<u>C 00352</u>	С	CUB	ED		1	3	22	23S	26E	567090	3572566* 🌍	1001	1867		
<u>C 00537</u>		С	ED		1	4	21	23S	26E	566277	3572558* 🌍	1135	400		
<u>C 01463</u>		С	ED	2	2	3	22	23S	26E	567599	3572678* 🌍	1140	295	265	30
<u>C 01022</u>		С	ED	4	3	2	22	23S	26E	568005	3572894* 🌍	1322	121	90	31
<u>C 01015</u>		С	ED	4	4	4	15	23S	26E	568408	3573714* 🌍	1567	318	245	73
C 03238		С	ED	4	4	4	15	23S	26E	568408	3573714* 🌍	1567	323	245	78
<u>C 00247</u>		С	ED	4	2	4	15	23S	26E	568406	3574119* 🌍	1660	315	230	85
<u>C 01639</u>		С	ED	4	2	4	15	23S	26E	568406	3574119* 🌍	1660	300	70	230
<u>C 00535</u>	С	CUB	ED	2	1	1	27	23S	26E	567195	3571862* 🌍	1711	1903		
<u>C 00367</u>	С	CUB	ED		3	2	28	23S	26E	566286	3571353* 🌍	2256	1909		
C 04449 POD1		С	ED	2	1	4	14	23S	26E	569582	3574424 🌍	2872	251	230	21
C 04201 POD1		С	ED	4	4	2	14	23S	26E	569626	3574546 🌍	2953	255	110	145
											Avera	age Depth to	Water:	185	feet
												Minimum	Depth:	70	feet
												Maximum	Depth:	265	feet
Record Count: 14															

UTMNAD83 Radius Search (in meters):

Easting (X): 566850.11

Northing (Y): 3573538.18

Radius: 3000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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New Mexico Office of the State Engineer Point of Diversion Summary

			(quart	ers are 1=	=NW 2=	=NE 3=	=SW 4=SE	Ξ)				
			(quai	rters are s	malles	t to lar	gest)	(NAD8	33 U	TM in meter	rs)	
Well Tag	PC	OD Number	Q64	Q16 Q4	Sec	Tws	Rng		Х		Y	
	С	03238	4	4 4	15	23S	26E	5684	108	3573714	4* 🌍	
Driller Licer	ıse:	1348	Driller Co	ompany	и: ТА	YLO	R WATE	ER WE	LL :	SERVICE	E	
Driller Name	e:											
Drill Start D	ate:	10/17/2005	Drill Finis	sh Date	:	12/2	28/2005	F	Plug	Date:		
Log File Dat	te:	01/23/2006	PCW Rcv	/ Date:				5	Sou	rce:	5	Shallow
Pump Type:	:		Pipe Disc	charge	Size:			E	sti	mated Yi	eld: 6	60 GPM
Casing Size	:	6.00	Depth W	ell:		323	s feet	[)ep	th Water	: 2	245 feet
	Wate	er Bearing Strati	fications:	Тор	Bott	om	Descrip	otion				
				311		319	Limesto	ne/Dol	omi	te/Chalk		
		Casing Per	forations:	Тор	Bott	om						
				303		323						

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



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To Lizklen

You forwarded this message on 1/5/2021 8:23 AM.

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Liz,

That well was an existing water well we used on 5/8/1997. At that time the water level was at 304'. I do not have any other data for it. Thanks Travis

From: Liz Klein <<u>lklein@3bearlk.com</u>> Sent: Monday, January 4, 2021 11:22 AM To: <u>travis.glenn@outlook.com</u> Subject: Water Level Data C-02522

Attached is a copy of the information on the New Mexico State Engineer's Office site on well C-02522 for one of your wells. As we discussed we are trying to get groundwater level data in the vicinity of our remediation site (Section 21, T235, R26E). If you have any water level information that was obtained during the drilling of the well that you could forward that would be great. Or if you have a current groundwater level of that well that would also be very helpful. The New Mexico OCD has requested that we find groundwater level data from the general area of our remediation project.

Please let me know if you have any questions. Really appreciate your time and help.

Thank you.

Liz Klein

3Bear Energy, LLC 303-882-4404 (C) <u>Riem@3bearBc.com</u> 1512 Larimer Street, Suite 540 Denver, CO 80202



•

From: To:	Liz Klein Hamlet, Robert, EMNRD
Cc: Bcc:	Bratcher, Mike, EMNRD: Eads, Cristina, EMNRD Mike Solomon: Scott Spicher
Subject: Date: Attachments:	RE: 3Baar Expedited Liner Variance Request - Dark Carryon Spill NRM2034257903 Tuesday, January 5, 2021 8:37:00 AM (17522 PDRS edf
Importance:	High
	il from Glenn's Water Well Service. Glenn's Water Well Service drilled the well in 1997 and below indicates that the water level in 1997 was 304'. This well is within ½ mile of our site and the 25 years old. I would like to proceed with using this information for the remediation plan. And will submit the plan today.
Please let me kr	iow if you have any concerns or questions.
Thank you.	
Liz 303-882-4404	
FILE MESSAGE	
Rignore X Reply	1 Constant C
and the second s	Respond Quick Steps 14 Move Tags 16 Editing Zoom DDI 758 AM
	s Glenn <travis.glenn@outlook.com> ter Level Data C-02522</travis.glenn@outlook.com>
To Liz Alen ① You forwarded this mes	stage on 1/5/2021 8:23 AM.
CALIDICAL This amail and	pinated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.
Liz,	
At that time the wate I do not have any othe	ing water well we used on S/k/1997. r level was at 304". r data for R.
Thanks Travis From: Liz Klein < <u>iklein</u> Sent: Monday, Januar To: travis.glenn@outk	γ 4, 2021 11:22 AM
Subject: Water Level (Data C-02522
during the drilling of th	he well that you could forward that would be great. Or if you have a current groundwater level of that well that would also be very helpful. The New Mexico OCD has requested that we find groundwater level data from the general area of our remediation project.
Thank you.	you have any questions. Really appreciate your time and help.
Liz Klein 3Bear Energy, LLC	
303-882-4404 (C) Iklein@3bearlik.com 1512 Larimer Street, Sui Denver, CO 80202	se 540
3Bear Energy	
J6/	
	Robert, EMNRD [mailto:Robert.Hamlet@state.nm.us] anuary 4, 2021 8:30 AM
To: Liz Klein <lkl< td=""><td>ein@3bearllc.com> ke, EMNRD <mike.bratcher@state.nm.us>; Eads, Cristina, EMNRD <cristina.eads@state.nm.us></cristina.eads@state.nm.us></mike.bratcher@state.nm.us></td></lkl<>	ein@3bearllc.com> ke, EMNRD <mike.bratcher@state.nm.us>; Eads, Cristina, EMNRD <cristina.eads@state.nm.us></cristina.eads@state.nm.us></mike.bratcher@state.nm.us>
	ear Expedited Liner Variance Request - Dark Canyon Spill NRM2034257903
CAUTION: This em	ail originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.
Liz,	
There are 2 well	s that are less than ½ mile (2,640 feet) from the release location. C01140 has a recorded year of 1963, which is older than 25 years. C02522 doesn't have an accompanying fluid level
	wo options are to shoot a static fluid level on one of the wells if they haven't been P&A'd or to drill a borehole. Please, let us know your decision.
Environmental B	
811 S. First Stree	nservation Division et Artesia, NM 88210
	obert, hamlet@state.nm.us d.state.nm.us/OCD/
SUIT OF NEW MERES	
(ET)	
P CONSERVATION OVID	
-	
	t <u>klein@3bearlic.com</u> > December 31, 2020 8:00 AM
	ert, EMNRD < <u>Robert.Hamlet@state.nm.us</u> > ike, EMNRD < <u>mike.bratcher@state.nm.us</u> >; Eads, Cristina, EMNRD < <u>Cristina.Eads@state.nm.us</u> >
	E: 3Bear Expedited Liner Variance Request - Dark Canyon Spill NRM2034257903
Please let me kr	iow if you're available for a call to discuss. Thanks, Liz
From: Liz Klein	
Sent: Monday, [December 28, 2020 11:59 AM
Cc: Bratcher, Mi	rert, EMNRD < <u>Robert.Hamlet@state.nm.us</u> > ke, EMNRD < <u>mike.bratcher@state.nm.us</u> >; Eads, Cristina, EMNRD < <u>Cristina.Eads@state.nm.us</u> >
Subject: RE: 3Be Importance: Hig	ear Expedited Liner Variance Request - Dark Canyon Spill NRM2034257903 gh

I respectfully submit the following groundwater information for consideration related to the Dark Canyon Spill location groundwater level. We understand that the OCD 2019 guidance (*Procedures for Implementation of the Spill Rule (19.15.29 INMAC)*) outlines that it is preferable that the means to determining depth to groundwater are within ½ mile of the release and that the water level information is no more than 25 years old. However, the historic and current water well information for the general vicinity, less than one mile of the spill location both up and down gradient, indicates a localized groundwater level of more than 200' in depth. As such we are requesting a case by case review to determine if the information below information is acceptable. I also spoke to Talon and they do not believe they will be able to drill to 51' due to the cobble and rejection they have encountered. Based on this information 3Bear requests that the remediation plan be submitted based on the groundwater data below and the criteria you outlined in your email dated December 21, 2020.

Please let me know if this data is acceptable and that a borehole will not be required. I can forward the relevant information for each well and/or include in the remediation plan.

Thank you for your prompt review of this information.

Liz Klein Director, EHS Regulatory Compliance 3Bear Energy, LLC 303-882-4404 (C) <u>Iklein@ 3bearllc.com</u> 1512 Larimer Street, Suite 540 Denver, CO 80202



	Depth	Depth		
	Well	Water	Distance to	Year of
Well Number	(feet)	(feet)	Site (feet)	Record
С				
02522	325		1105	1997
C 01140	325	310	1189	1963
C 00341	1881	280 - 290	3270	1952
С				
01463	295	265	3727	1971
USGS 3218		255.9	4019	1987
USGS 3217		230.2	4022	1956
С				
01015	318	245	5147	1961
С				
03238	323	245	5147	2005
С				
00247	315	255	5457	1952
C 03815	400		3264	2015



From: Liz Klein

Sent: Monday, December 21, 2020 2:27 PM

To: Hamlet, Robert, EMNRD <<u>Robert.Hamlet@state.nm.us</u>>

Cc: Bratcher, Mike, EMNRD <<u>mike, bratcher@state.nm.us</u>>; Eads, Cristina, EMNRD <<u>Cristina, Eads@state.nm.us</u>> Subject: Re: 3Bear Expedited Liner Variance Request - Dark Canyon Spill NRM2034257903

Thank you. I'll double check but thought the well info was less than 25 years old (1997) and less than a 1/2 mile from the site.

Get Outlook for iOS

From: Hamlet, Robert, EMNRD <<u>Robert, Hamlet@state.nm.us</u>> Sent: Monday, December 21, 2020 2:03:59 PM To: Liz Klein <<u>klein@3bearlic.com</u>> Cc: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; Eads, Cristina, EMNRD <<u>Cristina.Eads@state.nm.us</u>> Subject: RE: 3Bear Expedited Liner Variance Request - Dark Canyon Spill NRM2034257903

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Liz,

When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. In the pasture area, 4 feet below the ground surface, soil contamination limits revert back to Table 1 "Closure Criteria for Soils Impacted by a Release" included in the spill rule.

A borehole will need to be completed down to 51' below ground surface to make a groundwater determination. If no groundwater is found, the release would need to be delineated/excavated to 10,000 mg/kg for chlorides. It looks like you have delineated/excavated the release for chlorides to 10,000 mg/kg.

After the borehole has been completed, upload the newly updated remediation plan to the payment portal including the 2 variance requests and the borehole drillers log. If the borehole doesn't show groundwater in the top 50' and the site characterization is complete, we can review the two variances in the remediation plan and finalize a decision.

I understand this is a deep excavation and will need to be expedited. Please, send me the P.O. Number of the remediation plan once it's been uploaded to the payment portal and I will try to review it as quickly as possible.

Please let me know if you have any further questions. Regards,

Robert Hamlet Environmental Eng. Tech. III Environmental Bureau EMNRD - Oil Conservation Division 811 S. First Street | Artesia, NM 88210

811 S. First Street | Artesia, NM 88210 505.748.1283 | robert.hamlet@state.nm.us http://www.emprd.state.nm.us/OCD/



From: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>> Sent: Monday, December 21, 2020 9:55 AM To: Hamlet, Robert, EMNRD <<u>Robert.Hamlet@state.nm.us</u>> Subject: FW: 3Bear Expedited Liner Variance Request - Dark Canyon Spill NRM2034257903

From: Liz Klein <<u>Iklein@3bearllc.com</u>> Sent: Friday, December 18, 2020 3:41 PM To: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>> Subject: [EXT] 3Bear Expedited Liner Variance Request - Dark Canyon Spill NRM2034257903

3Bear Energy requests review and approval of a liner variance for the Dark Canyon Produced Water Spill (NRM2034257903) that occurred on November 20th, 2020. After characterization of the area, 3Bear proposes to leave soils in place that have chloride concentrations of greater than 600 mg/kg chloride. As outlined in the example in OCD guidance dated September 6, 2019 Section V Liners Require a Variance; *After removal of contaminated soils from the uppermost four feet in an area where the depth to groundwater is between 51 and 100 feet the responsible party wishes to install a synthetic liner atop soils which varied in depth from 6' to 24' and requests paproval to install a synthetic liner. The soils that will be left in place below the liner have chloride concentrations between 0 and 7,200 mg/kg based on sampling to date (see attached Data Table Site Boring Results). The sampling by Talon has indicated that TPH, and BTEX are not analytes of concern for this event (please see attached laboratory report). The groundwater research indicates that the depth to groundwater in the near vicinity is 210, see attached reference groundwater information provided.*

As discussed, due to boring refusals encountered at 18 to 24' bgs because of the presence of a cobble layer and attempts to test trench the impacted area to depths greater than 24' bgs no additional samples could be taken. Due to the cobble encountered and the "cave-in" of the trenches due to soil instability the area became too unstable to trench safely at greater depths. Additionally, as the trenching moved to the south a hardpan layer was encountered which indicates that vertical migration should not occur past that depth.

Based on the site characterization; we are respectfully requesting a variance to install and seat a liner at a depth of 6' bgs. which would be at a depth below the existing infrastructure to prevent any leaching. We will collect composite confirmation soil samples of the current bottom of the excavated area to document chloride levels left in place, as well as sidewall samples in conformance with the NMOCD sampling guidance in Section VII Closure Sampling Plans (September 6, 2019 Guidance). The characteristics of the site indicate that groundwater has not been impacted and the placement of a liner will prevent any potential surface water from reaching the soils greater than 600 mg/kg so no leaching will occur.

We are also requesting permission for these composite samples to only be analyzed for chlorides. The sampling by Talon has indicated that TPH, and BTEX are not analytes of concern for this event.

Due to the depth of the excavation we are concerned with both potential safety and environmental impacts of leaving the excavation open and would like to place the liner as soon as possible to reduce the safety and environmental risks associated with an open excavation. The approval of the variance will provide equal or better protection of groundwater, public health and the environment.

Please let me know if you have any questions or need additional information. 3Bear appreciates the NMOCD's continued coordination and communication on this remediation.

Thank you.

Liz Klein Director, EHS Regulatory Compliance 38ear Energy, LLC 303-882-4404 (C) <u>kleine⁶ 3bearlic.com</u> 1512 Larimer Street, Suite 540 Denver, CO 80202





Amarillo, TX - Artesia, NM Midland, TX - Oklahoma City, OK San Antonio, TX - Fort Collins, CO

BORING LOG

Boring Number: B – (Job Number: 7029	58.001.02	Driller/Co.: Talon/LPE Tom Evens
Site Name: Durk Conyon	LPST #	Logger: 16m Twins	Bit Size: 5 '7/8 "
Location: Corlsbal, NM	Weather:		Rig Type: Reichdrill
Date: 3/8 - 3/10	Sample Retrieval Metho	d: Grab	Drilling Method: Mud Robry

Time	Sample Number	Sample Interval (ft)	Sample Recovery (ft)	nscs	Sample Material/Comments (include composition, moisture, hardness, grain size, color)	ODOR	PID (ppm)
		0-18'			Crowelly Loan		
		18-25			Hard Chravels/Colddes		
		25-50'			Crowelly Lown Hard Crowls/Colddes Hard Pun (Shule) Crowels		
		50-51			Gravels		
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APPENDIX III

C-141 Forms

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

Incident ID	NRM2034257903
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: 3 Bear Delaware Operating – NM, LLC	OGRID: 372603
Contact Name: Liz Klein	Contact Telephone: (303) 882-4404
Contact email: lklein@3bearllc.com	Incident # (assigned by OCD)
Contact mailing address 1512 Larimer St. Suite 540, Denver, CO 80202	

Location of Release Source

Latitude <u>32.296589</u>

Longitude <u>-104.289958</u> (NAD 83 in decimal degrees to 5 decimal places)

Site Name: Dark Canyon Valve Set	Site Type: Valve Set
Date Release Discovered: 11/20/2020	API# (if applicable):

Unit Letter	Section	Township	Range	County
А	21	23\$	26E	Eddy

Surface Owner: State Federal Tribal Private

Nature and Volume of Release

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

1.1acorre	an(3) Released (Beleet an that apply and attach calculations of specific	Justification for the volumes provided cere ()
Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls) 4,000 bbls	Volume Recovered (bbls) estimated approximately
		4000 bbls, based on volume of all saturated soils
		removed
	Is the concentration of dissolved chloride in the	Yes No
	produced water >10,000 mg/l?	
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: Pipe	failure. Investigating cause of failure. Pipe being sent t	to laboratory for analysis.

e 2 Oil Conservation Division Diricit R P Was this a major If YES, for what reason(s) does the responsible party consider this a major release? Was this a major If YES, for what reason(s) does the responsible party consider this a major release? Because the spill was greater than 25 bbls in volume this incident is considered a major release. ID 15.29.7(A) NMAC? W Ves □ No If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Initial notification was given by voicemail and email by Elisabeth Klein, 3Bear Energy, on 11/20/2020 to Mike Bracher, District 2 and emard-ocd-district2spills@state.maus. Initial Response The responsible party must anderdade the following actions immediately unless they could create a safety hazerd that would result to injury The source of the release has been stopped. The impacted area has been sourced to protect human health and the environment. Released 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 information given above have not been stopped in the actions described above have not been undertaken, explain why: If all the actions described above have not been undertaken, explain why: Per 19.15.29.8 B, (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remedial information are give	ge 2	State of New Mexico	Incident ID	NRM2034257903
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within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), 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 file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: Elisabeth Klein Title: Director, EHS Regulatory Compliance Signature: Date: 11/27/2020 email: Iklein@3bearllc.com Telephone: (303) 882-4404				
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 file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: Elisabeth Klein Title: Director, EHS Regulatory Compliance Signature:				
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Signature:	has begun, please attach	a narrative of actions to date. If remedial efforts have	e been successfully complete	ed or if the release occurre
email: lklein@3bearllc.com Telephone:(303) 882-4404 OCD Only OCD Only	has begun, please attach within a lined containmen I hereby certify that the info regulations all operators are public health or the environ failed to adequately investig	a narrative of actions to date. If remedial efforts have at area (see $19.15.29.11(A)(5)(a)$ NMAC), please attack rmation given above is true and complete to the best of my k required to report and/or file certain release notifications and ment. The acceptance of a C-141 report by the OCD does no gate and remediate contamination that pose a threat to ground	e been successfully complete h all information needed for o nowledge and understand that p d perform corrective actions for t relieve the operator of liability water, surface water, human hea	ed or if the release occurred closure evaluation. ursuant to OCD rules and releases which may endanger should their operations have lth or the environment. In
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Received by: <u>Ramona Marcus</u> Date: <u>12/7/2020</u>	has begun, please attach within a lined containment I hereby certify that the info regulations all operators are public health or the environ failed to adequately investig addition, OCD acceptance of and/or regulations. Printed Name:Elisa Signature:Elisa	a narrative of actions to date. If remedial efforts have an arrative of actions to date. If remedial efforts have and area (see 19.15.29.11(A)(5)(a) NMAC), please attack rmation given above is true and complete to the best of my k required to report and/or file certain release notifications and ment. The acceptance of a C-141 report by the OCD does no ate and remediate contamination that pose a threat to ground f a C-141 report does not relieve the operator of responsibilit abeth Klein Title:Director, EHS WMADD Date:	e been successfully complete h all information needed for o mowledge and understand that p d perform corrective actions for bt relieve the operator of liability water, surface water, human hea ty for compliance with any other <u>S Regulatory Compliance</u> 7/2020	ed or if the release occurrent closure evaluation. ursuant to OCD rules and releases which may endanger should their operations have lth or the environment. In federal, state, or local laws
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	has begun, please attach within a lined containmen I hereby certify that the info regulations all operators are public health or the environ failed to adequately investig addition, OCD acceptance o and/or regulations. Printed Name:Elisa Signature:Elisa email:Iklein@31	a narrative of actions to date. If remedial efforts haven at area (see 19.15.29.11(A)(5)(a) NMAC), please attack rmation given above is true and complete to the best of my kr required to report and/or file certain release notifications and ment. The acceptance of a C-141 report by the OCD does no rate and remediate contamination that pose a threat to ground f a C-141 report does not relieve the operator of responsibilit abeth Klein Title: Director, EHS Date: Date: bearllc.com Telephone:	e been successfully complete h all information needed for o nowledge and understand that p d perform corrective actions for to to relieve the operator of liability water, surface water, human hea ty for compliance with any other <u>S Regulatory Compliance</u> 7/2020 (303) 882-4404	ed or if the release occurre closure evaluation. ursuant to OCD rules and releases which may endanger should their operations have lth or the environment. In federal, state, or local laws

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APPENDIX IV

PHOTOGRAPHIC DOCUMENTATION



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APPENDIX V

CORRESPONDENCE

Rebecca Pons

From:	Liz Klein <lklein@3bearllc.com></lklein@3bearllc.com>
Sent:	Tuesday, December 29, 2020 8:59 AM
То:	Rebecca Pons
Subject:	FW: 3Bear Expedited Liner Variance Request - Dark Canyon Spill NRM2034257903

This message originated from an **External Source**. Please use proper judgment and caution when opening attachments, clicking links, or responding to this email.

From: Hamlet, Robert, EMNRD [mailto:Robert.Hamlet@state.nm.us]
Sent: Monday, December 21, 2020 2:04 PM
To: Liz Klein <lklein@3bearllc.com>
Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Eads, Cristina, EMNRD <Cristina.Eads@state.nm.us>
Subject: RE: 3Bear Expedited Liner Variance Request - Dark Canyon Spill NRM2034257903

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Liz,

When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. In the pasture area, 4 feet below the ground surface, soil contamination limits revert back to Table 1 "Closure Criteria for Soils Impacted by a Release" included in the spill rule.

A borehole will need to be completed down to 51' below ground surface to make a groundwater determination. If no groundwater is found, the release would need to be delineated/excavated to 10,000 mg/kg for chlorides. It looks like you have delineated/excavated the release for chlorides to 10,000 mg/kg.

After the borehole has been completed, upload the newly updated remediation plan to the payment portal including the 2 variance requests and the borehole drillers log. If the borehole doesn't show groundwater in the top 50' and the site characterization is complete, we can review the two variances in the remediation plan and finalize a decision.

I understand this is a deep excavation and will need to be expedited. Please, send me the P.O. Number of the remediation plan once it's been uploaded to the payment portal and I will try to review it as quickly as possible.

Please let me know if you have any further questions.

Regards,

Robert Hamlet ● Environmental Eng. Tech. III Environmental Bureau EMNRD - Oil Conservation Division 811 S. First Street | Artesia, NM 88210 505.748.1283 | robert.hamlet@state.nm.us http://www.emnrd.state.nm.us/OCD/

Received by OCD: 3/19/2021 4:51:41 PM



From: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>
Sent: Monday, December 21, 2020 9:55 AM
To: Hamlet, Robert, EMNRD <<u>Robert.Hamlet@state.nm.us</u>>
Subject: FW: 3Bear Expedited Liner Variance Request - Dark Canyon Spill NRM2034257903

From: Liz Klein <<u>lklein@3bearllc.com</u>>
Sent: Friday, December 18, 2020 3:41 PM
To: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>
Subject: [EXT] 3Bear Expedited Liner Variance Request - Dark Canyon Spill NRM2034257903

3Bear Energy requests review and approval of a liner variance for the Dark Canyon Produced Water Spill (NRM2034257903) that occurred on November 20th, 2020. After characterization of the area, 3Bear proposes to leave soils in place that have chloride concentrations of greater than 600 mg/kg chloride. As outlined in the example in OCD guidance dated September 6, 2019 Section V Liners Require a Variance; *After removal of contaminated soils from the uppermost four feet in an area where the depth to groundwater is between 51 and 100 feet the responsible party wishes to install a synthetic liner atop soils with a chloride concentration greater than 10,000 mg/kg and then backfill. 3Bear has excavated all saturated soils which varied in depth from 6' to 24' and requests approval to install a synthetic liner. The soils that will be left in place below the liner have chloride concentrations between 0 and 7,200 mg/kg based on sampling to date (see attached Data Table Site Boring Results). The sampling by Talon has indicated that TPH, and BTEX are not analytes of concern for this event (please see attached laboratory report). The groundwater information provided.*

As discussed, due to boring refusals encountered at 18 to 24' bgs because of the presence of a cobble layer and attempts to test trench the impacted area to depths greater than 24' bgs no additional samples could be taken. Due to the cobble encountered and the "cave-in" of the trenches due to soil instability the area became too unstable to trench safely at greater depths. Additionally, as the trenching moved to the south a hardpan layer was encountered which indicates that vertical migration should not occur past that depth.

Based on the site characterization; we are respectfully requesting a variance to install and seat a liner at a depth of 6' bgs. which would be at a depth below the existing infrastructure to prevent any leaching. We will collect composite confirmation soil samples of the current bottom of the excavated area to document chloride levels left in place, as well as sidewall samples in conformance with the NMOCD sampling guidance in Section VII Closure Sampling Plans (September 6, 2019 Guidance). The characteristics of the site indicate that groundwater has not been impacted and the placement of a liner will prevent any potential surface water from reaching the soils greater than 600 mg/kg so no leaching will occur.

We are also requesting permission for these composite samples to only be analyzed for chlorides. The sampling by Talon has indicated that TPH, and BTEX are not analytes of concern for this event.

Due to the depth of the excavation we are concerned with both potential safety and environmental impacts of leaving the excavation open and would like to place the liner as soon as possible to reduce the safety and environmental risks

associated with an open excavation. The approval of the variance will provide equal or better protection of groundwater, public health and the environment.

Please let me know if you have any questions or need additional information. 3Bear appreciates the NMOCD's continued coordination and communication on this remediation.

Thank you.

Liz Klein Director, EHS Regulatory Compliance 3Bear Energy, LLC 303-882-4404 (C) <u>lklein@3bearllc.com</u> 1512 Larimer Street, Suite 540 Denver, CO 80202



From: Hamlet, Robert, EMNRD [mailto:Robert.Hamlet@state.nm.us]
Sent: Tuesday, January 26, 2021 1:51 PM
To: Liz Klein <<u>lklein@3bearllc.com</u>>
Cc: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; Eads, Cristina, EMNRD
<<u>Cristina.Eads@state.nm.us</u>>
Subject: RE: Review Requested: Work Plan Dark Canyon Spill NRM2034257903

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Liz,

Sorry I haven't got back to you sooner, we have been doing a lot of training the last few weeks. I reviewed the Glenn's Water Well Service AAUW and only see an Approximate depth of 325'. The information in the email from Travis Glenn is only him saying that the water level depth was 304'. The OCD needs scientific data collected from a verifiable source. At this point, we can't accept the groundwater depth determination that 3Bear has provided to us.

The bottom samples at each sample location appear to be under 10,000 mg/kg. It appears that the site could be vertically delineated with a shallow borehole to 51' to allow for verification of the depth. If water is not visible after reaching bottom-hole and waiting 72 hours, we would accept the results. We would just need a copy of the driller's log. Showing scientific proof that there is no groundwater within the top 50' of material is imperative in this release. If the borehole proves no groundwater in the top 50", we would be willing to allow 3Bear to backfill the excavation to 4' below ground surface with clean material, install a liner, then backfill to surface with clean material, contour/repair surface to previous condition. Additionally, please make sure the release is horizontally delineated to 600 mg/kg on the edges. Visual identification isn't evidence of the edge of a spill, only soil samples under 600 mg/kg for chlorides.

Please, keep us informed if you intend to drill a borehole.

Regards,

Robert Hamlet • Environmental Specialist - Advanced Environmental Bureau EMNRD - Oil Conservation Division 811 S. First Street | Artesia, NM 88210 505.748.1283 | robert.hamlet@state.nm.us http://www.emnrd.state.nm.us/OCD/



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APPENDIX VI

Laboratory Data

Hall Environmental Analy	vsis Laboratory, Inc	•		Analytical Report Lab Order 2011B49 Date Reported:	
CLIENT: Talon Artesia		Client	t Sample II	D: Dark Canyon C	
Project: 3 Bear Energy		Coll	ection Dat	e: 11/23/2020	
Lab ID: 2011B49-001	Matrix: SOIL	Re	ceived Dat	e: 11/24/2020 8:00:00 AM	1
Analyses	Result	RL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Analy	st: CAS
Chloride	9000	300	mg/Kg	100 11/24/2020 1:10:02 P	M 56623

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 1 of 0

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Hall Environmental Analy	vsis Laboratory, Inc	•			Analytical Report Lab Order 2011B49 Date Reported:	
CLIENT: Talon Artesia		Clien	t Sample II	D: Da	rk Canyon S.SW	
Project: 3 Bear Energy		Coll	lection Dat	e: 11/	/23/2020	
Lab ID: 2011B49-002	Matrix: SOIL	Re	ceived Dat	e: 11/	/24/2020 8:00:00 AM	- -
Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: CAS
Chloride	4300	150	mg/Kg	50	11/24/2020 1:22:27 PI	M 56623

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 2 of 0

Hall Environmental Analy	vsis Laboratory, Inc			Analytical Report Lab Order 2011B49 Date Reported:			
CLIENT: Talon Artesia			-	D: Dark Canyon E.SW-3	7		
Project: 3 Bear Energy Lab ID: 2011B49-003				Collection Date: 11/23/2020 Received Date: 11/24/2020 8:00:00 AM			
Analyses	Result	RL Qu	al Units	DF Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS				Analys	st: CAS		
Chloride	6100	300	mg/Kg	100 11/24/2020 1:34:52 P	M 56623		

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 3 of 0

Hall Environmental Analy	ysis Laboratory, Inc	2.			Analytical Report Lab Order 2011B49 Date Reported:	
CLIENT: Talon Artesia Project: 3 Bear Energy			t Sample II lection Dat		rk Canyon E.SW-2 /23/2020	
Lab ID: 2011B49-004	Matrix: SOIL	Re	ceived Dat	ate: 11/24/2020 8:00:00 AM		
Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS Chloride	2700	150	mg/Kg	50	Analys 11/24/2020 1:47:17 P	st: CAS

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 4 of 0

Hall Environmental Analy	ysis Laboratory, Inc	•			Analytical Report Lab Order 2011B49 Date Reported:	
CLIENT: Talon Artesia		Clien	t Sample II	D: Da	rk Canyon A	
Project: 3 Bear Energy	Collection Date: 11/23/2020 Matrix: SOIL Received Date: 11/24/2020 8:00:00 AM					
Lab ID: 2011B49-005					/24/2020 8:00:00 AM	[
Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: CAS
Chloride	4600	150	mg/Kg	50	11/24/2020 1:59:41 P	M 56623

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 5 of 0
Hall Environmental Analy	vsis Laboratory, Inc	•		Analytical Report Lab Order 2011B49 Date Reported:		
CLIENT: Talon Artesia		Client	t Sample II	D: Dark Canyon B		
Project: 3 Bear Energy	Collection Date: 11/23/2020					
Lab ID: 2011B49-006	Matrix: SOIL	Re	ceived Dat	e: 11/24/2020 8:00:00 AN	1	
Analyses	Result	RL Qu	al Units	DF Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS				Analy	st: CAS	
Chloride	5000	300	mg/Kg	100 11/24/2020 2:12:06 P	M 56623	

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 6 of 0

Hall Environmental Analy	vsis Laboratory, Inc	•			Analytical Report Lab Order 2011B49 Date Reported:	
CLIENT: Talon Artesia		Client Sample ID: Dark Canyon W.SW				
Project: 3 Bear Energy		Coll	ection Dat	e: 11/	/23/2020	
Lab ID: 2011B49-007	Matrix: SOIL	Rec	ceived Dat	e: 11/	/24/2020 8:00:00 AN	1
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: CAS
Chloride	260	60	mg/Kg	20	11/24/2020 11:49:56	AM 56623

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 7 of 0

Hall Environmental Analy	vsis Laboratory, Inc	•			Analytical Report Lab Order 2011B49 Date Reported:	
CLIENT: Talon Artesia		Client	t Sample II	D: Da	rk Canyon E.SW 1	
Project: 3 Bear Energy		Coll	lection Dat	e: 11/	/23/2020	
Lab ID: 2011B49-008	Matrix: SOIL	Re	ceived Dat	e: 11/	/24/2020 8:00:00 AN	1
Analyses	Result	RL Qu	ial Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: CAS
Chloride	ND	60	mg/Kg	20	11/24/2020 12:02:21	PM 56623

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 8 of 0

Hall Environmental Analy	vsis Laboratory, Inc	•		Analytical Report Lab Order 2011B49 Date Reported:	
CLIENT: Talon Artesia Project: 3 Bear Energy			-	D: Dark Canyon Source	
Lab ID: 2011B49-009	Collection Date: 11/23/2020 Matrix: SOIL Received Date: 11/24/2020 8:00:00 AM				
Analyses	Result	RL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Analys	st: CAS
Chloride	6200	300	mg/Kg	100 11/24/2020 2:24:31 PI	M 56623

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 9 of 0



December 17, 2020

Rebecca Pons Talon Artesia 408 West Texas Ave Artesia, NM 88210 TEL: FAX Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

OrderNo.: 2012706

RE: Dark Canyon SWD

Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 6 sample(s) on 12/15/2020 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 Analy	ysis Laboratory, In	nc.		Analytical Report Lab Order 2012706 Date Reported: 12/17	
CLIENT: Talon Artesia		Client	t Sample I	D: B-1 20'	
Project: Dark Canyon SWD		Coll	ection Dat	te: 12/14/2020 9:00:00 AN	Ν
Lab ID: 2012706-001	Matrix: SOIL	Re	ceived Dat	te: 12/15/2020 7:50:00 AN	Λ
Analyses	Result	RL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Analy	/st: VP
Chloride	6200	300	mg/Kg	100 12/16/2020 4:57:45 F	PM 57031

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 1 of 7

Hall Environmental Analy	ysis Laboratory, Ir	ıc.		Analytical Report Lab Order 2012706 Date Reported: 12/17/	/2020	
CLIENT: Talon Artesia		Client Sa	ample I	D: B-1 22'		
Project: Dark Canyon SWD	Collection Date: 12/14/2020 9:15:00 AM					
Lab ID: 2012706-002	Matrix: SOIL	Recei	ved Dat	te: 12/15/2020 7:50:00 AM	1	
Analyses	Result	RL Qual	Units	DF Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS				Analy	st: VP	
Chloride	8000	300	mg/Kg	100 12/16/2020 5:10:10 P	M 57031	

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 2 of 7

Hall Environmental Analy	ysis Laboratory, II	ıc.		Analytical Report Lab Order 2012706 Date Reported: 12/17		
CLIENT: Talon Artesia Project: Dark Canyon SWD Lab ID: 2012706-003	Matrix: SOIL	Client Sample ID: B-1 24' Collection Date: 12/14/2020 9:30:00 AM				
Analyses	Result			DF Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS Chloride	7200	300	mg/Kg	Anal <u>-</u> 100 12/16/2020 5:22:34 I	yst: VP PM 57031	

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 3 of 7

Hall Environmental Analy	ysis Laboratory, In	IC.			Analytical Report Lab Order 2012706 Date Reported: 12/17	/2020
CLIENT: Talon Artesia		Client Sa	ample II	D: B-3	3 20'	
Project: Dark Canyon SWD	Collection Date: 12/14/2020 10:00:00 AM					
Lab ID: 2012706-004	Matrix: SOIL	Recei	ved Dat	e: 12/	15/2020 7:50:00 AM	Л
Analyses	Result	RL Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	vst: VP
Chloride	2900	150	mg/Kg	50	12/16/2020 5:59:49 F	PM 57031

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 4 of 7

Hall Environmental Analy	ysis Laboratory, II	nc.		Analytical Report Lab Order 2012706 Date Reported: 12/12		
CLIENT: Talon Artesia		Client	Sample I	D: B-3 22'		
Project: Dark Canyon SWD	Collection Date: 12/14/2020 10:10:00 AM					
Lab ID: 2012706-005	Matrix: SOIL	Ree	ceived Dat	te: 12/15/2020 7:50:00 Al	Μ	
Analyses	Result	RL Qu	al Units	DF Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS				Anal	yst: VP	
Chloride	5500	300	mg/Kg	100 12/16/2020 6:12:13	PM 57031	

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 5 of 7

Hall Environmental Analy		Analytical Report Lab Order 2012706 Date Reported: 12/17/2020				
CLIENT: Talon Artesia		Client Sa	mple I	D: B-3 24'	=	
Project: Dark Canyon SWD	Collection Date: 12/14/2020 10:25:00 AM					
Lab ID: 2012706-006	Matrix: SOIL	Receiv	ved Dat	te: 12/15/2020 7:50:00 AM		
Analyses	Result	RL Qual	Units	DF Date Analyzed Bat	tch	
EPA METHOD 300.0: ANIONS				Analyst: VP	1	
Chloride	4000	150	mg/Kg	50 12/16/2020 6:24:38 PM 570)31	

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 6 of 7

Client: Project:		Artesia Canyon SWD									
Sample ID:	Sample ID: MB-57031 SampType: MBLK TestCode: EPA Method						300.0: Anion	s			
Client ID:	PBS	Batch	ID: 57	031	F	RunNo: 74	4032				
Prep Date:	12/16/2020	Analysis Da	ate: 12	2/16/2020	5	SeqNo: 20	612979	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-57031	SampTy	/pe: LC	S	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 57	031	F	RunNo: 74	4032				
Prep Date:	12/16/2020	Analysis Da	ate: 12	2/16/2020	S	SeqNo: 26	612980	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	96.1	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

Page 7 of 7

2012706

17-Dec-20

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HALL HALL ENVIRONMEN ANALYSIS LABORATOR	NTAL	TEL:	4 505-345-39	tal Analysis La 4901 Ha Albuquerque, N 075 FAX: 505 hallenvironme	wkins NE 1M 87109 Sai 345-4107	nple Log-In Cheo	Pag k List
Client Name: Talon A	rtesia	Work O	rder Numb	per: 2012706		RcptNo: 1	
Received By: Isaiah	Ortiz	12/15/202	20 7:50:00	АМ	Inc		
Completed By: Isaiah	Ortiz	12/15/202	20 8:30:21	AM	ILC	2~	
Reviewed By: JP	12/15-120	D					
Chain of Custody							
1. Is Chain of Custody co	omplete?			Yes 🔽	No 🗌	Not Present	
2. How was the sample of	lelivered?			Courier			
<u>Log In</u>							
3. Was an attempt made	to cool the sampl	es?		Yes 🗸	No 🗌	NA 🗌	
4. Were all samples recei	ived at a temperat	ture of >0° C to	6.0°C	Yes 🔽	No 🗌	NA 🗌	
5. Sample(s) in proper co	ontainer(s)?			Yes 🔽	No 🗌		
6. Sufficient sample volur	ne for indicated te	est(s)?		Yes 🖌	No 🗌		
7. Are samples (except V			2	Yes 🗹	No 🗌		
8. Was preservative adde		,		Yes	No 🗹		
9. Received at least 1 via	with headspace	<1/4" for AO VO	A 2	Yes	No 🗌	NA 🗸	
10. Were any sample cont				Yes	No 🗹		/
		TOKCH!		103		# of preserved bottles checked	
11. Does paperwork match (Note discrepancies on)		Yes 🗹	No 🗌	for pH: (<2 or >12 u	nless noted)
12. Are matrices correctly i		12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Yes 🗹	No 🗌	Adjusted?	
13. Is it clear what analyse		?		Yes 🗹	No 🗌		
14. Were all holding times (If no, notify customer f				Yes 🗹	No 🗌	Checked by: Stat	2115120
Special Handling (if a	applicable)						
15. Was client notified of a	all discrepancies v	vith this order?		Yes 🗌	No 🗌	NA 🗹	
Person Notified:			Date:	1			
By Whom:	A second s		Via:	eMail [Phone E Fax	In Person	
Regarding:]					State Auto Sank Autor Governitzarianar	
Client Instruction	ns:						
16. Additional remarks:							
17. Cooler Information							
Cooler No Temp			Seal No	Seal Date	Signed By		
1 0.6	Good	Not Present Not Present					

Page 1 of 1

		www.hallenvironmental.com	37109	Tel. 505-345-3975 Fax 505-345-4107	Analysis Request	↓0 ()1()	ləsq S ^{(†} (SW	PC III20 PC	280 (1) 228 227	8/s(504 3, 1 8 3, 1 7 8)))))))))))))))))))	setic y 83 3 Me 3r, 1 (AO)	94 P6 81 P6 81 P6 7P4 6 7P (5 70 (5 12 12 12 12 12 12 12 12 12 12 12 12 12	82 85 60 85 85 80 80 80 80										rks:	ERUY	PRICING
Time:	C Standard Rush 5- DAY	Project Name:	CANYON SWD		702958,001.01	()	208		COLLER	A Yes DNo		ding CF): P.Q. + D.1 (CF / 1.1 - (°C)	Preservative HEAL No.		(4 ASS 1 ILE/CODL		5	2	5	9				Received by Via: Date Time Remarks:	2 IUNIZ	Received by: Via: Date Time
Chain-of-Custody Record	ITHLON LPE		Mailing Address:	2014 ARTESIA, NIM 88210	Phone #: 515.146 8768	email or Fax#:	QA/QC Package:	Contraction Contraction Contraction Contraction		NELAC Other	EDD (Type)			Date Time Matrix Sample Name	B-14-20 9:00 501 B-1 201	1 9:15 1 8-1 22'	9:30 3-1 24 1	10:00 SST 320'	10:10	1 10:25 B-3 24'				Date: Time: Relinquished by:	121420 3:00m NA CCL	-



December 16, 2020

Rebecca Pons Talon Artesia 408 West Texas Ave Artesia, NM 88210 TEL: FAX

RE: Dark Canyon SWD

OrderNo.: 2012602

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: clients.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 23 sample(s) on 12/11/2020 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.

Analytical Report
Lab Order 2012602

Date Reported: 12/16/2020

CLIENT: Talon Artesia Project: Dark Canyon SWD	Client Sample ID: B-6 14' Collection Date: 12/9/2020 9:30:00 AM									
Lab ID: 2012602-001	Matrix: SOIL Received Date: 12/11/2020 8:0									
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch				
EPA METHOD 300.0: ANIONS					Analys	t: VP				
Chloride	12000	600	mg/Kg	200	12/14/2020 12:09:53 P	M 56965				
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	t: BRM				
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	12/12/2020 12:25:27 P	M 56935				
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	12/12/2020 12:25:27 P	M 56935				
Surr: DNOP	114	30.4-154	%Rec	1	12/12/2020 12:25:27 P	M 56935				
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: RAA				
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	12/13/2020 5:48:05 AM	1 56929				
Surr: BFB	81.2	75.3-105	%Rec	1	12/13/2020 5:48:05 AM	1 56929				
EPA METHOD 8021B: VOLATILES					Analys	t: RAA				
Benzene	ND	0.024	mg/Kg	1	12/13/2020 5:48:05 AM	1 56929				
Toluene	ND	0.049	mg/Kg	1	12/13/2020 5:48:05 AM	1 56929				
Ethylbenzene	ND	0.049	mg/Kg	1	12/13/2020 5:48:05 AM	1 56929				
Xylenes, Total	ND	0.098	mg/Kg	1	12/13/2020 5:48:05 AM	1 56929				
Surr: 4-Bromofluorobenzene	83.4	80-120	%Rec	1	12/13/2020 5:48:05 AM	1 56929				

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

Page 1 of 28

Hall Environmental Analy	ysis Laboratory, II	nc.		Analytical Report Lab Order 2012602 Date Reported: 12/16	/2020
CLIENT: Talon Artesia	· · · · · ·	Client S	-	D: B-6 16'	
Project:Dark Canyon SWDLab ID:2012602-002	Matrix: SOIL			te: 12/9/2020 9:40:00 AM te: 12/11/2020 8:00:00 AN	
Analyses	Result	RL Qua	l Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS Chloride	6800	300	mg/Kg	Analy 100 12/14/2020 12:22:18	vst: VP PM 56965

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 2 of 28

CLIENT: Talon Artesia

Project: Lab ID: Dark Canyon SWD

2012602-003

Analytical Report

Hall Environmental	Analysis	Laboratory.	Inc.
			,

Lab Order 2012602

Date Reported: 12/16/2020

	-	
		_
	Client Sample ID: B-6 18' R	
	Collection Date: 12/9/2020 9:55:00 AM	
Matrix: SOIL	Received Date: 12/11/2020 8:00:00 AM	

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	VP
Chloride	6900	300	mg/Kg	100) 12/14/2020 12:34:42 PM	1 56965
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst:	BRM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	12/12/2020 12:35:04 PN	1 56935
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	12/12/2020 12:35:04 PN	1 56935
Surr: DNOP	113	30.4-154	%Rec	1	12/12/2020 12:35:04 PN	1 56935
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	RAA
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	12/13/2020 6:11:01 AM	56929
Surr: BFB	83.2	75.3-105	%Rec	1	12/13/2020 6:11:01 AM	56929
EPA METHOD 8021B: VOLATILES					Analyst:	RAA
Benzene	ND	0.025	mg/Kg	1	12/13/2020 6:11:01 AM	56929
Toluene	ND	0.050	mg/Kg	1	12/13/2020 6:11:01 AM	56929
Ethylbenzene	ND	0.050	mg/Kg	1	12/13/2020 6:11:01 AM	56929
Xylenes, Total	ND	0.099	mg/Kg	1	12/13/2020 6:11:01 AM	56929
Surr: 4-Bromofluorobenzene	85.2	80-120	%Rec	1	12/13/2020 6:11:01 AM	56929

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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Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2012602

Date Reported: 12/16/2020

CLIENT: Talon Artesia		C	ient Sample II	D: B-	8 14'	
Project: Dark Canyon SWD		(Collection Dat	e: 12/	/9/2020 10:30:00 AM	
Lab ID: 2012602-004	Matrix: SOIL		Received Dat	e: 12/	/11/2020 8:00:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed Ba	atch
EPA METHOD 300.0: ANIONS					Analyst: VP	2
Chloride	7400	300	mg/Kg	100	0 12/14/2020 1:11:56 PM 569	965
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: BR	RM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	12/12/2020 12:44:43 PM 569	5935
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	12/12/2020 12:44:43 PM 569	935
Surr: DNOP	150	30.4-154	%Rec	1	12/12/2020 12:44:43 PM 569	935
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst: RA	AA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	12/13/2020 6:33:53 AM 569	929
Surr: BFB	84.2	75.3-105	%Rec	1	12/13/2020 6:33:53 AM 569	929
EPA METHOD 8021B: VOLATILES					Analyst: RA	AA
Benzene	ND	0.024	mg/Kg	1	12/13/2020 6:33:53 AM 569	6929
Toluene	ND	0.048	mg/Kg	1	12/13/2020 6:33:53 AM 569	6929
Ethylbenzene	ND	0.048	mg/Kg	1	12/13/2020 6:33:53 AM 569	929
Xylenes, Total	ND	0.097	mg/Kg	1	12/13/2020 6:33:53 AM 569	929
Surr: 4-Bromofluorobenzene	86.9	80-120	%Rec	1	12/13/2020 6:33:53 AM 569	5929

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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Hall Environmental Analy	vsis Laboratory. Ir	IC.		Analytical Report Lab Order 2012602 Date Reported: 12/16/2020
CLIENT: Talon Artesia	, 515 114 , 51 4 , 51 4 , 51	Client Sa	-	D: B-8 16'
Project:Dark Canyon SWDLab ID:2012602-005	Matrix: SOIL	0011000		te: 12/9/2020 10:40:00 AM te: 12/11/2020 8:00:00 AM
Analyses	Result	RL Qual	Units	DF Date Analyzed Batcl
EPA METHOD 300.0: ANIONS Chloride	2300	150	mg/Kg	Analyst: VP 50 12/14/2020 1:24:20 PM 56965

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 Analy	vsis Laboratorv. Ir	nc.		Analytical Report Lab Order 2012602 Date Reported: 12/16	/2020
CLIENT: Talon Artesia Project: Dark Canyon SWD	,	Client Sar	-		
Lab ID: 2012602-006	Matrix: SOIL	00110011		: 12/11/2020 8:00:00 AN	-
Analyses	Result	RL Qual	Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS Chloride	3300	150	mg/Kg	Analy 50 12/14/2020 1:36:44 F	vst: VP PM 56965

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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Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2012602

Date Reported: 12/16/2020

CLIENT: Talon Artesia Project: Dark Canyon SWD			ient Sample II		8 20' R /9/2020 11:00:00 AM	
Lab ID: 2012602-007	Matrix: SOIL	,			/11/2020 8:00:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	3500	150	mg/Kg	50	12/14/2020 1:49:09 PN	56965
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM
Diesel Range Organics (DRO)	10	9.5	mg/Kg	1	12/12/2020 12:54:19 P	M 56935
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	12/12/2020 12:54:19 P	M 56935
Surr: DNOP	114	30.4-154	%Rec	1	12/12/2020 12:54:19 P	M 56935
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	12/13/2020 6:56:51 AN	56929
Surr: BFB	81.2	75.3-105	%Rec	1	12/13/2020 6:56:51 AN	56929
EPA METHOD 8021B: VOLATILES					Analyst	RAA
Benzene	ND	0.024	mg/Kg	1	12/13/2020 6:56:51 AN	56929
Toluene	ND	0.048	mg/Kg	1	12/13/2020 6:56:51 AN	56929
Ethylbenzene	ND	0.048	mg/Kg	1	12/13/2020 6:56:51 AN	56929
Xylenes, Total	ND	0.095	mg/Kg	1	12/13/2020 6:56:51 AN	56929
Surr: 4-Bromofluorobenzene	83.8	80-120	%Rec	1	12/13/2020 6:56:51 AN	56929

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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Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2012602

Date Reported: 12/16/2020

CLIENT: Talon Artesia		C	ient Sample II	D: B-	12 6'					
Project: Dark Canyon SWD	Collection Date: 12/9/2020 11:20:00 AM									
Lab ID: 2012602-008	Matrix: SOIL		Received Dat	e: 12	/11/2020 8:00:00 AM					
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch				
EPA METHOD 300.0: ANIONS					Analys	t: VP				
Chloride	1300	61	mg/Kg	20	12/14/2020 1:37:25 AM	1 56965				
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	t: BRM				
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	12/12/2020 1:04:06 PM	1 56935				
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	12/12/2020 1:04:06 PM	1 56935				
Surr: DNOP	114	30.4-154	%Rec	1	12/12/2020 1:04:06 PM	1 56935				
EPA METHOD 8015D: GASOLINE RANGE	E				Analys	t: RAA				
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	12/13/2020 7:19:47 AM	1 56929				
Surr: BFB	80.9	75.3-105	%Rec	1	12/13/2020 7:19:47 AM	1 56929				
EPA METHOD 8021B: VOLATILES					Analys	t: RAA				
Benzene	ND	0.025	mg/Kg	1	12/13/2020 7:19:47 AM	1 56929				
Toluene	ND	0.050	mg/Kg	1	12/13/2020 7:19:47 AN	56929				
Ethylbenzene	ND	0.050	mg/Kg	1	12/13/2020 7:19:47 AN	1 56929				
Xylenes, Total	ND	0.099	mg/Kg	1	12/13/2020 7:19:47 AN	1 56929				
Surr: 4-Bromofluorobenzene	83.7	80-120	%Rec	1	12/13/2020 7:19:47 AN	1 56929				

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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Hall Environmental Analy		Analytical Report Lab Order 2012602 Date Reported: 12/16/2020			
CLIENT: Talon Artesia Project: Dark Canyon SWD			t Sample II lection Dat	D: B-12 8' e: 12/9/2020 11:30:00 A	M
Lab ID: 2012602-009	Matrix: SOIL	Re	ceived Dat	e: 12/11/2020 8:00:00 A	М
Analyses	Result	RL Qu	ual Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Ana	lyst: VP
Chloride	710	60	mg/Kg	20 12/14/2020 1:49:50	AM 56965

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 Analy	ysis Laboratory, In	IC.		Analytical Report Lab Order 2012602 Date Reported: 12/1	
CLIENT: Talon Artesia		Client	Sample II	D: B-12 10'	
Project: Dark Canyon SWD		Colle	ection Dat	e: 12/9/2020 11:35:00 A	М
Lab ID: 2012602-010	Matrix: SOIL	Rec	eived Dat	e: 12/11/2020 8:00:00 A	М
Analyses	Result	RL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Anal	yst: VP
Chloride	280	60	mg/Kg	20 12/14/2020 2:02:14	AM 56965

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 Analy		Analytical Report Lab Order 2012602 Date Reported: 12/16/2020				
CLIENT: Talon Artesia			t Sample II			
Project:Dark Canyon SWDLab ID:2012602-011	Collection Date: 12/9/2020 11:40:00 AM Matrix: SOIL Received Date: 12/11/2020 8:00:00 AM					
Analyses	Result	RL Qu	ual Units	DF Date Analyze	d Batch	
EPA METHOD 300.0: ANIONS Chloride	320	60	mg/Kg		Analyst: VP 4:39 AM 56965	

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 Analy		Analytical Report Lab Order 2012602 Date Reported: 12/16/2020				
CLIENT: Talon Artesia			t Sample II			
Project:Dark Canyon SWDLab ID:2012602-012	Collection Date: 12/9/2020 11:45:00 AM Matrix: SOIL Received Date: 12/11/2020 8:00:00 AM					
Analyses	Result	RL Qu	ual Units	DF Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS Chloride	240	60	mg/Kg	Anal 20 12/14/2020 2:27:04	yst: VP AM 56965	

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 Analy	ysis Laboratory, In	ic.		Analytical Repo Lab Order 201260 Date Reported: 12	2
CLIENT: Talon Artesia		Client	Sample II	D: B-12 16'	
Project: Dark Canyon SWD		Coll	ection Dat	e: 12/9/2020 11:55:00	AM
Lab ID: 2012602-013	Matrix: SOIL	Rec	ceived Dat	e: 12/11/2020 8:00:00	AM
Analyses	Result	RL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				An	alyst: VP
Chloride	200	60	mg/Kg	20 12/14/2020 2:39:2	8 AM 56965

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.					Analytical Report Lab Order 2012602 Date Reported: 12/16/2020			
CLIENT: Talon Artesia		Client	Sample II	D: B-1	12 18'			
Project: Dark Canyon SWD		Colle	ction Dat	e: 12/	9/2020 12:05:00 PN	1		
Lab ID: 2012602-014	Matrix: SOIL	Reco	eived Dat	e: 12/	11/2020 8:00:00 AN	Ν		
Analyses	Result	RL Qua	d Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analy	/st: VP		
Chloride	140	60	mg/Kg	20	12/14/2020 2:51:53 4	AM 56965		

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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Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2012602

Date Reported: 12/16/2020

CLIENT: Talon Artesia		Cl	ient Sample II): B-	12 20' R	
Project: Dark Canyon SWD		(Collection Date	e: 12	/9/2020 12:15:00 PM	
Lab ID: 2012602-015	Matrix: SOIL		Received Date	e: 12	/11/2020 8:00:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	VP
Chloride	670	60	mg/Kg	20	12/14/2020 3:04:17 AM	56965
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst:	BRM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	12/12/2020 1:13:56 PM	56935
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	12/12/2020 1:13:56 PM	56935
Surr: DNOP	116	30.4-154	%Rec	1	12/12/2020 1:13:56 PM	56935
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	12/13/2020 7:42:44 AM	56929
Surr: BFB	81.2	75.3-105	%Rec	1	12/13/2020 7:42:44 AM	56929
EPA METHOD 8021B: VOLATILES					Analyst:	RAA
Benzene	ND	0.024	mg/Kg	1	12/13/2020 7:42:44 AM	56929
Toluene	ND	0.048	mg/Kg	1	12/13/2020 7:42:44 AM	56929
Ethylbenzene	ND	0.048	mg/Kg	1	12/13/2020 7:42:44 AM	56929
Xylenes, Total	ND	0.096	mg/Kg	1	12/13/2020 7:42:44 AM	56929
Surr: 4-Bromofluorobenzene	84.3	80-120	%Rec	1	12/13/2020 7:42:44 AM	56929

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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Surr: 4-Bromofluorobenzene

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2012602

Date Reported: 12/16/2020

12/14/2020 2:49:31 AM 56929

CLIENT: Talon Artesia Client Sample ID: E. BG 0-1'								
Project: Dark Canyon SWD	Collection Date: 12/9/2020 12:30:00 PM							
Lab ID: 2012602-016	Matrix: SOIL		Received Dat	e: 12	/11/2020 8:00:00 AM			
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analyst	: VP		
Chloride	ND	60	mg/Kg	20	12/14/2020 3:16:42 AM	56965		
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	BRM		
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	12/12/2020 1:23:40 PM	56935		
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	12/12/2020 1:23:40 PM	56935		
Surr: DNOP	112	30.4-154	%Rec	1	12/12/2020 1:23:40 PM	56935		
EPA METHOD 8015D: GASOLINE RANG	ЭЕ				Analyst	RAA		
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	12/14/2020 2:49:31 AM	56929		
Surr: BFB	79.3	75.3-105	%Rec	1	12/14/2020 2:49:31 AM	56929		
EPA METHOD 8021B: VOLATILES					Analyst	RAA		
Benzene	ND	0.024	mg/Kg	1	12/14/2020 2:49:31 AM	56929		
Toluene	ND	0.048	mg/Kg	1	12/14/2020 2:49:31 AM	56929		
Ethylbenzene	ND	0.048	mg/Kg	1	12/14/2020 2:49:31 AM	56929		
Xylenes, Total	ND	0.097	mg/Kg	1	12/14/2020 2:49:31 AM	56929		

82.3

80-120

%Rec

1

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
- Page 16 of 28

Hall Environmental Anal		Analytical Report Lab Order 2012602 Date Reported: 12/16/2020				
CLIENT: Talon Artesia			t Sample II			
Project:Dark Canyon SWDLab ID:2012602-017	Collection Date: 12/9/2020 12:35:00 PM Matrix: SOIL Received Date: 12/11/2020 8:00:00 AM					
Analyses	Result	RL Qu	ual Units	DF Date	Analyzed	Batch
EPA METHOD 300.0: ANIONS Chloride	ND	60	mg/Kg	20 12/14	Anal 4/2020 3:29:07	yst: VP AM 56965

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.				Analytical Report Lab Order 2012602 Date Reported: 12/16/2020		
CLIENT: Talon Artesia		Client	t Sample II	D: E. BG 1()'	
Project: Dark Canyon SWD	Collection Date: 12/9/2020 12:50:00 PM					
Lab ID: 2012602-018	Matrix: SOIL	Re	ceived Dat	e: 12/11/20	20 8:00:00 Al	М
Analyses	Result	RL Qu	ual Units	DF Date	Analyzed	Batch
EPA METHOD 300.0: ANIONS					Anal	yst: VP
Chloride	ND	59	mg/Kg	20 12/14	4/2020 4:06:21 /	AM 56965

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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Analytical Report

Hall	l En	vironn	nental	Ana	lvsis	Lal	borat	orv.	Inc.

Lab Order 2012602

Date Reported: 12/16/2020

CLIENT: Talon Artesia Project: Dark Canyon SWD	Client Sample ID: E. BG 20' R Collection Date: 12/9/2020 1:05:00 PM							
Lab ID: 2012602-019	Matrix: SOIL Received Date: 12/11/2020 8:00:00 AM							
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analyst	: VP		
Chloride	ND	60	mg/Kg	20	12/14/2020 4:18:45 AM	56965		
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM		
Diesel Range Organics (DRO)	15	9.4	mg/Kg	1	12/12/2020 1:33:25 PM	56935		
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	12/12/2020 1:33:25 PM	56935		
Surr: DNOP	141	30.4-154	%Rec	1	12/12/2020 1:33:25 PM	56935		
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst	RAA		
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	12/14/2020 3:12:20 AM	56929		
Surr: BFB	80.2	75.3-105	%Rec	1	12/14/2020 3:12:20 AM	56929		
EPA METHOD 8021B: VOLATILES					Analyst	: RAA		
Benzene	ND	0.024	mg/Kg	1	12/14/2020 3:12:20 AM	56929		
Toluene	ND	0.048	mg/Kg	1	12/14/2020 3:12:20 AM	56929		
Ethylbenzene	ND	0.048	mg/Kg	1	12/14/2020 3:12:20 AM	56929		
Xylenes, Total	ND	0.096	mg/Kg	1	12/14/2020 3:12:20 AM	56929		
Surr: 4-Bromofluorobenzene	82.8	80-120	%Rec	1	12/14/2020 3:12:20 AM	56929		

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
- 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 Sample pH Not In Range
- Р RL Reporting Limit

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Analytical Report

Lab Order 2012602

Date Reported: 12/16/2020

CLIENT: Talon Artesia	Client Sample ID: W. BG 0-1' Collection Date: 12/9/2020 1:20:00 PM Matrix: SOIL Received Date: 12/11/2020 8:00:00 AM						
Project:Dark Canyon SWDLab ID:2012602-020							
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	: VP	
Chloride	ND	61	mg/Kg	20	12/14/2020 4:31:09 AM	56965	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM	
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	12/12/2020 2:12:02 PM	56938	
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	12/12/2020 2:12:02 PM	56938	
Surr: DNOP	112	30.4-154	%Rec	1	12/12/2020 2:12:02 PM	56938	
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA	
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	12/14/2020 3:35:10 AM	56929	
Surr: BFB	80.3	75.3-105	%Rec	1	12/14/2020 3:35:10 AM	56929	
EPA METHOD 8021B: VOLATILES					Analyst	RAA	
Benzene	ND	0.025	mg/Kg	1	12/14/2020 3:35:10 AM	56929	
Toluene	ND	0.050	mg/Kg	1	12/14/2020 3:35:10 AM	56929	
Ethylbenzene	ND	0.050	mg/Kg	1	12/14/2020 3:35:10 AM	56929	
Xylenes, Total	ND	0.10	mg/Kg	1	12/14/2020 3:35:10 AM	56929	
Surr: 4-Bromofluorobenzene	83.6	80-120	%Rec	1	12/14/2020 3:35:10 AM	56929	

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
- 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 Sample pH Not In Range
- Р RL

Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.			Analytical Report Lab Order 2012602 Date Reported: 12/16/2020						
CLIENT: Talon Artesia		Client Sample ID: W. BG 4'							
Project: Dark Canyon SWD	Collection Date: 12/9/2020 1:30:00 PM								
Lab ID: 2012602-021	Matrix: SOIL Received Date: 12/11/2020 8:00:00 AN								
Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analy	/st: VP			
Chloride	ND	61	mg/Kg	20	12/14/2020 2:26:23 F	PM 56976			

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 Analy	vsis Laboratory, Ir	10.		Analytical Repo Lab Order 201260 Date Reported: 12	2	
CLIENT: Talon Artesia		Client	t Sample II	D: W. BG 10'		
Project: Dark Canyon SWD		Coll	lection Dat	te: 12/9/2020 1:45:00 P	М	
Lab ID: 2012602-022	Matrix: SOIL	Re	ceived Dat	te: 12/11/2020 8:00:00	AM	
Analyses	Result	RL Qu	ual Units	DF Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS				An	alyst: VP	
Chloride	ND 60 mg/Kg 20 12/14/2020 2:38:48 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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Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2012602

Date Reported: 12/16/2020

CLIENT: Talon Artesia			ient Sample II			
Project: Dark Canyon SWD		(Collection Dat	e: 12	/9/2020 2:00:00 PM	
Lab ID: 2012602-023	Matrix: SOIL		Received Dat	e: 12	/11/2020 8:00:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	61	mg/Kg	20	12/14/2020 2:51:13 PM	56976
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	12/12/2020 2:41:03 PM	56938
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	12/12/2020 2:41:03 PM	56938
Surr: DNOP	116	30.4-154	%Rec	1	12/12/2020 2:41:03 PM	56938
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	12/14/2020 3:58:01 AM	56929
Surr: BFB	81.5	75.3-105	%Rec	1	12/14/2020 3:58:01 AM	56929
EPA METHOD 8021B: VOLATILES					Analyst	RAA
Benzene	ND	0.023	mg/Kg	1	12/14/2020 3:58:01 AM	56929
Toluene	ND	0.046	mg/Kg	1	12/14/2020 3:58:01 AM	56929
Ethylbenzene	ND	0.046	mg/Kg	1	12/14/2020 3:58:01 AM	56929
Xylenes, Total	ND	0.092	mg/Kg	1	12/14/2020 3:58:01 AM	56929
Surr: 4-Bromofluorobenzene	85.0	80-120	%Rec	1	12/14/2020 3:58:01 AM	56929

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 Sample pH Not In Range
- Р RL Reporting Limit

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QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	Talon Artesia	`						
Project:	Dark Canyon SWI)						
Sample ID: MB-5	6965 Samp	Type: MBLK	Tes	tCode: EPA Method	300.0: Anions			
Client ID: PBS	Bato	ch ID: 56965	I	RunNo: 73975				
Prep Date: 12/1	3/2020 Analysis	Date: 12/13/202	0 :	SeqNo: 2609349	Units: mg/Kg			
Analyte	Result	PQL SPK va	alue SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5						
Sample ID: LCS-	56965 Samp	Type: LCS	Tes	stCode: EPA Method	300.0: Anions			
Client ID: LCSS	Bato	ch ID: 56965	I	RunNo: 73975				
Prep Date: 12/1	3/2020 Analysis	Date: 12/13/202	0	SeqNo: 2609350	Units: mg/Kg			
Analyte	Result	PQL SPK va	alue SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5 15	5.00 0	92.6 90	110			
Sample ID: MB-5	6976 Samp	Type: MBLK	Tes	stCode: EPA Method	300.0: Anions			
Client ID: PBS	Bato	ch ID: 56976	I	RunNo: 73996				
Prep Date: 12/1	4/2020 Analysis	Date: 12/14/202	0 :	SeqNo: 2610588	Units: mg/Kg			
Analyte	Result	PQL SPK va	alue SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5						
Sample ID: LCS-	56976 Samp	Type: LCS	Tes	stCode: EPA Method	300.0: Anions			
Client ID: LCSS	Bato	ch ID: 56976	I	RunNo: 73996				
Prep Date: 12/1	4/2020 Analysis	Date: 12/14/202	0 :	SeqNo: 2610589	Units: mg/Kg			
Analyte	Result	PQL SPK va	alue SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5 15	5.00 0	93.8 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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2012602

16-Dec-20

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Surr. DNOP 5.5 5.000 109 30.4 154 Sample ID: LCS-56938 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56938 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609490 Units: mg/Kg Analyse Result POL SPK value SPK Ref Val %REC LowLint HighLinit %RPD RPDL init Qual Dises Range Organics (DRO) 61 10 50.00 122 70 130.4 154 Sample ID: LCS-56944 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56944 RunNo: 73978 Units: "%Rec Analyte Result POL SPK value SPK Ref Val %REC LowLinit HighLinit %RPD RPDLinit Qual Sum: DNOP 4.1 5.000 81.9 30.4 154 Sample ID: LCS-56946 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCS	Client:Talon AProject:Dark Ca	rtesia nyon SWD			
Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609489 Units: mg/Kg Analyte Result POL SPK value	Sample ID: LCS-56935	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Buest Range Organics (DRO) 5.5 5.000 109 30.4 1154	Client ID: LCSS	Batch ID: 56935	RunNo: 73978		
Desel Renge Organics (DR0) 51 10 \$0.00 102 70 130 Surr DNOP 5.5 5.000 109 30.4 154 Sample ID: LCS-56938 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Prep Date: 12/11/2020 Analytei Batte hiD: 56938 RunNo: 73978 Prep Date: 12/11/2020 Analytei Result POL SPK Ref Val %REC LowLinit HighLinit %RPD RPDLimit Qual Desel Range Organics (DR0) 61 10 50.00 122 70 130 Sur: DNOP 7.2 5.000 144 30.4 154 Sample ID: LCS-56944 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56944 RunNo: 73978 Prep Date: 12/12/2020 SeqNo: 2609491 Units: %Rec Analyte Result POL SPK kef Val %REC LowLimit HighLimit %RPD Imit Qual	Prep Date: 12/11/2020	Analysis Date: 12/12/2020	SeqNo: 2609489	Units: mg/Kg	
Surr. DNOP 5.5 5.000 109 30.4 154 Sample ID: LCS-56938 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56938 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609490 Units: mg/Kg Analyse Result POL SPK value SPK Ref Val %REC LowLint HighLinit %RPD RPDL init Qual Dises Range Organics (DRO) 61 10 50.00 122 70 130.4 154 Sample ID: LCS-56944 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56944 RunNo: 73978 Units: "%Rec Analyte Result POL SPK value SPK Ref Val %REC LowLinit HighLinit %RPD RPDLinit Qual Sum: DNOP 4.1 5.000 81.9 30.4 154 Sample ID: LCS-56946 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCS	Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Client ID: LCSS Batch ID: 56938 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609490 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Diesel Range Organics (DRO) 61 10 50.00 0 122 70 130 Surr. DNOP 7.2 5.000 0 122 70 130 Sample ID: LCS-56944 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56944 RunNo: 73978 Sample ID: LCS-56946 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56946 RunNo: 73978 Sample ID: LCS-56946 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS	Diesel Range Organics (DRO) Surr: DNOP				
Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609490 Units: mg/kg Analyte Result PQL SPK value	Sample ID: LCS-56938	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Analyte Result PQL SPK value SPK ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Diesel Range Organics (DRO) 61 10 50.00 0 122 70 130 Sur: DNOP 7.2 5.000 144 30.4 154 Sample ID: LCS-56944 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCS-56944 RunNo: 73978 Units: %Rec Analyte Result POL SPK Ref Val %REC LowLimit HighLimit %ReD RPDLimit Qual Surr: DNOP 4.1 5.000 81.9 30.4 154 Sample ID: LCS-56946 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56946 RunNo: 73978 Qual Sur: DNOP 4.7	Client ID: LCSS	Batch ID: 56938	RunNo: 73978		
Diesel Range Organics (DRO) 61 10 50.00 0 122 70 130 Surr: DNOP 7.2 5.000 144 30.4 154 Sample ID: LCS-56944 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56944 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date:: 12/12/2020 SeqNo: 2609491 Units: %Rec Analyte Result PQL SPK value SPK Value SPK Value SPK Value SeqNo: 2609491 Units: %Rec Analyte Result PQL SPK value SPK Value SPK Value SPR Value SPR Value SPR Value SPR Value SPR Value SeqNo: 2609492 Units: %Rec Sample ID: LCSS Batch ID: 56946 RunNo: 73978 Prep Date: 12/11/2020 SeqNo: 2609492 Units: %Rec Analyte Result PQL SPK value SPK Value SPK Value SeqNo: 2609493 Units: mg/Kg Sample ID: MB-56935 SampType:	Prep Date: 12/11/2020	Analysis Date: 12/12/2020	SeqNo: 2609490	Units: mg/Kg	
Surr: DNOP 7.2 5.000 144 30.4 154 Sample ID: LCS-56944 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56944 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609491 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 4.1 5.000 81.9 30.4 154 Sample ID: LCS-56946 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56946 RunNo: 73978 Surr: DNOP 4.7 5.000 94.1 30.4 154 Surr: DNOP 4.7 5.000 94.1 30.4 154 Surr: DNOP 4.7 5.000 94.1 30.4 154 Sample ID: MB-56935 SampType: MBLK <th>Analyte</th> <th>Result PQL SPK value</th> <th>SPK Ref Val %REC LowLimit</th> <th>HighLimit %RPD</th> <th>RPDLimit Qual</th>	Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Sample ID: LCS-56944 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56944 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609491 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 4.1 5.000 81.9 30.4 154 Qual	Diesel Range Organics (DRO)				
Client ID: LCSS Batch ID: 56944 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609491 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr. DNOP 4.1 5.000 81.9 30.4 154	Surr: DNOP	7.2 5.000	144 30.4	154	
Prep Date:12/11/2020Analysis Date:12/12/2020SeqNo:2609491Units:%RecAnalyteResultPQLSPK valueSPK Ref Val%RECLowLimitHighLimit%RPDRPDLimitQualSurr: DNOP4.15.00081.930.415450001545000154Sample ID:LCS-56946SampType:LCSTestCode:EPA Method 8015M/D: Diesel Range OrganicsClient ID:LCSSBatch ID:56946RunNo:73978Prep Date:12/11/2020Analysis Date:12/12/2020SeqNo:2609492Units:%RecAnalyteResultPQLSPK valueSPK ref Val%RECLowLimitHighLimit%RPDRPDLimitQualSurr: DNOP4.75.00094.130.4154560015456001545600154Sample ID:MB-56935SampType:MBLKTestCode:EPA Method 8015M/D: Diesel Range OrganicsClient ID:94.130.415456001545600156	Sample ID: LCS-56944	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	Organics
AnalyteResultPQLSPK valueSPK Ref Val%RECLowLimitHighLimit%RPDRPDLimitQualSurr: DNOP4.15.00081.930.41541540Sample ID:LCS-56946SampType:LCSTestCode:EPA Method 8015M/D: Diesel Range OrganicsClient ID:LCSSBatch ID:56946RunNo:73978Prep Date:12/11/2020Analysis Date:12/12/2020SeqNo:2609492Units:AnalyteResultPQLSPK valueSPK Ref Val%RECLowLimitHighLimit%RPDRPDLimitQualSurr: DNOP4.75.00094.130.4154000	Client ID: LCSS	Batch ID: 56944	RunNo: 73978		
Surr: DNOP 4.1 5.000 81.9 30.4 154 Sample ID: LCS-56946 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56946 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609492 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 4.7 5.000 94.1 30.4 154 Sample ID: MB-56935 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Qual Glient ID: PBS Batch ID: 56935 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609493 Units: mg/Kg Analyte Result PQL SPK value SPK Value SPK Value SPK Value SeqNo: 2609493 Units: mg/Kg Sample ID: MB-56938 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Sample ID: MB-56938 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Sample ID: MB-56	Prep Date: 12/11/2020	Analysis Date: 12/12/2020	SeqNo: 2609491	Units: %Rec	
Sample ID: LCS-56946 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 56946 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609492 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 4.7 5.000 94.1 30.4 154 Qual Sample ID: MB-56935 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Qual Qual Qual Qual Qual Qual	Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Client ID: LCSS Batch ID: 56946 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609492 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 4.7 5.000 94.1 30.4 154	Surr: DNOP	4.1 5.000	81.9 30.4	154	
Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609492 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 4.7 5.000 94.1 30.4 154 500 94.1 30.4 154 Sample ID: MB-56935 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 56935 RunNo: 73978 Vertice Vertic	Sample ID: LCS-56946	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	Organics
AnalyteResultPQLSPK valueSPK Ref Val%RECLowLimitHighLimit%RPDRPDLimitQualSurr: DNOP4.75.00094.130.4154154154154154Sample ID:MB-56935SampType:MBLKTestCode:EPA Method 8015M/D:Diesel Range OrganicsOrganicsClient ID:PBSBatch ID:56935RunNo:73978111	Client ID: LCSS	Batch ID: 56946	RunNo: 73978		
Surr: DNOP4.75.00094.130.4154Sample ID: MB-56935SampType: MBLKTestCode: EPA Method 8015M/D: Diesel Range OrganicsClient ID:PBSBatch ID: 56935RunNo: 73978Prep Date:12/11/2020Analysis Date:12/12/2020AnalyteResultPQLSPK valueDiesel Range Organics (DRO)ND10Motor Oil Range Organics (MRO)ND50Surr: DNOP1210.00123Sample ID:MB-56938SampType: MBLKTestCode: EPA Method 8015M/D: Diesel Range OrganicsClient ID:PBSBatch ID: 56938RunNo: 73978Prep Date:12/11/2020SeqNo: 2609494Units: mg/KgAnalyteResultPQLSPK value SPK Ref Val%RECAnalyteResultPQLSPK value SPK Ref Val%RECLowLimitHighLimit%RPDRPDLimitQual	Prep Date: 12/11/2020	Analysis Date: 12/12/2020	SeqNo: 2609492	Units: %Rec	
Surr: DNOP4.75.00094.130.4154Sample ID: MB-56935SampType: MBLKTestCode: EPA Method 8015M/D: Diesel Range OrganicsClient ID:PBSBatch ID: 56935RunNo: 73978Prep Date:12/11/2020Analysis Date:12/12/2020AnalyteResultPQLSPK valueDiesel Range Organics (DRO)ND10Motor Oil Range Organics (MRO)ND50Surr: DNOP1210.001210.00123Sample ID:MB-56938SampType: MBLKClient ID:PBSBatch ID: 56938Rent ID:56938RunNo: 73978Prep Date:12/11/2020SeqNo: 2609494Units:mg/KgAnalyteResultPQLPUSPK valueSPK Ref Val%RECLowLimitHighLimit%RECSeqNo: 2609494Units: mg/KgAnalyteResultPQLPQLSPK valueSPK Ref Val%RECLowLimitHighLimit%REDRPDLimitQual	Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Client ID: PBS Batch ID: 56935 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609493 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Diesel Range Organics (DRO) ND 10 ND 50 Sample Organics (MRO) ND 50 Sample ID: MB-56938 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 56938 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609494 Units: mg/Kg Analyte PBS Batch ID: 56938 RunNo: 73978 F Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609494 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD ENDLimit Qual	, ,	4.7 5.000	94.1 30.4	154	
Client ID: PBS Batch ID: 56935 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609493 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Diesel Range Organics (DRO) ND 10 Qual Qual Qual Qual Qual Qual Qual Qual Qual	Sample ID: MB-56935	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 12 10.00 123 30.4 154 Sample ID: MB-56938 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 56938 RunNo: 73978 Vints: mg/Kg Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609494 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Client ID: PBS		RunNo: 73978	-	•
Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 12 10.00 123 30.4 154 Sample ID: MB-56938 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 56938 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609494 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Prep Date: 12/11/2020	Analysis Date: 12/12/2020	SeqNo: 2609493	Units: mg/Kg	
Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 12 10.00 123 30.4 154 Sample ID: MB-56938 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 56938 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609494 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP 12 10.00 123 30.4 154 Sample ID: MB-56938 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 56938 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609494 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Diesel Range Organics (DRO)				
Sample ID: MB-56938 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 56938 RunNo: 73978 Prep Date: 12/11/2020 SeqNo: 2609494 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual					
Client ID: PBS Batch ID: 56938 RunNo: 73978 Prep Date: 12/11/2020 Analysis Date: 12/12/2020 SeqNo: 2609494 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Surr: DNOP	12 10.00	123 30.4	154	
Prep Date: 12/11/2020 SeqNo: 2609494 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Sample ID: MB-56938	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Client ID: PBS	Batch ID: 56938	RunNo: 73978		
	Prep Date: 12/11/2020	Analysis Date: 12/12/2020	SeqNo: 2609494	Units: mg/Kg	
Diesel Range Organics (DRO) ND 10	Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
	Diesel Range Organics (DRO)	ND 10			

- * 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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2012602

16-Dec-20

WO#:

Analyte Surr: DNOP

Analyte

Analyte

Surr: DNOP

Surr: DNOP

Client ID: W. BG 0-1'

Prep Date: 12/11/2020

Diesel Range Organics (DRO)

Client ID: W. BG 0-1'

Prep Date: 12/11/2020

Diesel Range Organics (DRO)

Sample ID: 2012602-020AMSD

Sample ID: 2012602-020AMS

QC SUMMARY REPORT Hall Environme

9.3

Result

Result

63

7.1

63

7.3

SampType: MS

Batch ID: 56938

Analysis Date: 12/12/2020

PQL

SampType: MSD

Batch ID: 56938

Analysis Date: 12/12/2020

PQL

9.3

9.6

10.00

48.12

4.812

SPK value

46.64

4.664

SPK value SPK Ref Val %REC

3.618

SPK Ref Val

3.618

C	mental Analysis Lal	ooratory, Inc.			WO#:	2012602 16-Dec-20
	alon Artesia Park Canyon SWD					
Sample ID: MB-5693	SampType: MBLK	TestCo	de: EPA Method	8015M/D: Diesel Rai	nge Organics	
Client ID: PBS	Batch ID: 56938	Run	No: 73978			
Prep Date: 12/11/20	20 Analysis Date: 12/12	2020 Seq	No: 2609494	Units: mg/Kg		
Analyte	Result PQL SF	K value SPK Ref Val %	REC LowLimit	HighLimit %RPI	D RPDLimit	Qual
Motor Oil Range Organics (MRO) ND 50					
Surr: DNOP	11	10.00	112 30.4	154		
Sample ID: MB-5694	SampType: MBLK	TestCo	de: EPA Method	8015M/D: Diesel Rai	nge Organics	
Client ID: PBS	Batch ID: 56944	Run	No: 73978			
Prep Date: 12/11/20	20 Analysis Date: 12/12	2020 Seq	No: 2609495	Units: %Rec		
Analyte	Result PQL SF	K value SPK Ref Val %	REC LowLimit	HighLimit %RPI	D RPDLimit	Qual
Surr: DNOP	8.9	10.00	88.9 30.4	154		
Sample ID: MB-5694	SampType: MBLK	TestCo	de: EPA Method	8015M/D: Diesel Rai	nge Organics	
Client ID: PBS	Batch ID: 56946	Run	No: 73978			
Prep Date: 12/11/20	20 Analysis Date: 12/12	2020 Seq	No: 2609496	Units: %Rec		
Analyte	Result PQL SF	K value SPK Ref Val %	REC LowLimit	HighLimit %RPI	D RPDLimit	Qual

30.4

LowLimit

LowLimit

15

30.4

15

30.4

93.1

RunNo: 73978

124

151

RunNo: 73978

%REC

128

152

SeqNo: 2609500

SeqNo: 2609499

154

Units: mg/Kg

184

154

Units: mg/Kg

184

154

HighLimit

%RPD

%RPD

0.0112

0

RPDLimit

RPDLimit

23.9

0

Qual

Qual

HighLimit

TestCode: EPA Method 8015M/D: Diesel Range Organics

TestCode: EPA Method 8015M/D: Diesel Range Organics

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

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

RL Reporting Limit

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Talon A Project: Dark C	Artesia anyon SWD									
Sample ID: Ics-56929	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D: Gasc	line Rang	e	
Client ID: LCSS	Batch	n ID: 569	929	R	unNo: 7	3970				
Prep Date: 12/11/2020	Analysis D	ate: 12	2/12/2020	S	eqNo: 2	609030	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	72.5	106			
Surr: BFB	990		1000		99.1	75.3	105			
Sample ID: mb-56929	SampT	ype: ME	BLK	Test	tCode: El	PA Method	8015D: Gasc	line Rang	e	
Client ID: PBS	Batch	D: 569	929	R	unNo: 7	3970				
Prep Date: 12/11/2020	Analysis D	ate: 12	2/12/2020	S	eqNo: 2	609032	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.6	75.3	105			

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 27 of 28

WO#: 2012602 16-Dec-20 Talon Artesia

Dark Canyon SWD

Client:

Project:

Analvte

Ethylbenzene

Xylenes, Total

Client ID:

Analyte

Ethylbenzene

Xylenes, Total

Qualifiers:

D

Н

ND

PQL

Benzene Toluene

Benzene

Toluene

Sample ID: LCS-56929

Prep Date: 12/11/2020

Surr: 4-Bromofluorobenzene

PBS

Sample ID: mb-56929

Prep Date: 12/11/2020

Surr: 4-Bromofluorobenzene

Client ID: LCSS

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

SampType:

Analysis Date: Result

0.98

1.0

1.0

3.0

0.91

Result

ND

ND

ND

ND

0.87

Batch ID:

0.050

0.10

SampType: MBLK

Batch ID: 56929

Analysis Date: 12/12/2020

PQL

0.025

0.050

0.050

0.10

1.000

3.000

1.000

1.000

SPK value SPK Ref Val

0

0

101

100

91.1

RunNo: 73970

%REC

87.4

SeqNo: 2609084

ype: LC	s	Test	Code: FI	PA Method	8021B: Volat	iles		
ypc. LO		103		Amethou	00210. 00101			
ID: 56	929	R	unNo: 7	3970				
oto: 11	2/12/2020	c	eqNo: 2	600000	Units: mg/K	'n		
	2/12/2020	C		009002	Units. mg/n	g		
PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
0.025	1.000	0	97.9	80	120			
0.050	1.000	0	101	80	120			

120

120

120

Units: mg/Kg

120

%RPD

RPDLimit

Qual

HighLimit

80

80

80

TestCode: EPA Method 8021B: Volatiles

LowLimit

80

в Analyte detected in the associated Method Blank

Е Value above quantitation range

J Р

RL Reporting Limit

- Analyte detected below quantitation limits
- Sample pH Not In Range

Holding times for preparation or analysis exceeded Practical Quanitative Limit

Value exceeds Maximum Contaminant Level

Sample Diluted Due to Matrix

Not Detected at the Reporting Limit

% Recovery outside of range due to dilution or matrix S

Page 28 of 28

WO#: 2012602

16-Dec-20

•

ived by OCD: 3/.	19/2021 4:	51:41 PM	На	ıll Environme	ental Analysis La	boratory		Page
ANAL	CONMENT YSIS RATORY	AL		EL: 505-345-3	4901 Har Albuquerque, N 3975 FAX: 505-2 ts.hallenvironme	M 87109 Sa 845-4107	mple Log-In Ch	eck List
Client Name:	Talon Arte	sia	Work	: Order Num	ber: 2012602		RcptNo: 1	
Received By:	Cheyenn	e Cason	12/11/2	2020 8:00:00	D AM			
Completed By:	Erin Mele	endrez	12/11/2	2020 8:27:00	D AM			
Reviewed By:	8m 17	2/11/20						
Chain of Cus	<u>tody</u>							
1. Is Chain of C	ustody comp	olete?			Yes 🗹	No 🗌	Not Present	
2. How was the	sample deliv	vered?			<u>Courier</u>			
<u>Log In</u> 3. Was an attern	pt made to	cool the sample	es?		Yes 🗸	No 🗌		
	• • • • • • • • • • • • •							
4. Were all samp	les received	l at a temperat	ure of >0° C	to 6.0°C	Yes 🔽	No 🗌		
5. Sample(s) in p	proper conta	iner(s)?			Yes 🔽	No 🗌		
6. Sufficient sam	ple volume t	for indicated te	st(s)?		Yes 🗹	No 🗌		
7. Are samples (except VOA	and ONG) pro	perly preserv	ed?	Yes 🗹	No 🗌		
8. Was preservat	tive added to	bottles?			Yes	No 🔽	NA 🗌	
9. Received at le	ast 1 vial wit	th headspace <	<1/4" for AQ \	/OA?	Yes 🗌	No 🗌	NA 🔽	
10. Were any sam	nple contain	ers received br	oken?		Yes	No 🔽		
							# of preserved bottles checked	
11. Does paperwo (Note discrepa					Yes 🗹	No 🗌	for pH:	
12. Are matrices c		15.15	of Custody2		Yes 🗸	No 🗌	(<2 or >1 Adjusted?	2 unless noted)
13. Is it clear what					Yes ⊻ Yes ✓			
14. Were all holdir		•			Yes 🗹		Checked by:	2 valuta
(If no, notify cu								12/11/2
Special Handli	ing (if app	olicable)						
15. Was client no	tified of all d	iscrepancies w	vith this order	?	Yes 🗌	No 🗌	NA 🔽	
Person	Notified:	l		Date:	: ʃ			
By Who				Via:	eMail] Phone 🗌 Fax	In Person	
Regardi	- 50						to racio indefinimente foi con a conserva da que en la conserva da conserva da conserva	
Client In	structions:			Lower and the second				
16. Additional rer	narks:							
17. <u>Cooler Infor</u>	mation							
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By		
1	5.5	Good						
2 3	1.9	Good						
3	2.1 1.9	Good Good						
Para series and a series of the series of th		2000						

Page 1 of 1

Received by OCD	: 3/19/20 <mark>21</mark> 4	:51:41 PM		Т							Τ	P	age 81 of	8
HALL ENVIRONMENTAL ANALYSIS LABORATORY	4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	03, NO ₂ , PO4, SO4 115 504.1) 504.1) 504.3 504.3 504.3 504.3 504.3 504.3 504.3 504.3 504.3 504.3 504.3 504.3 504.3 504.3 504.3 504.3 505.5 5050	8081 Pesticid EDB (Method PAHs by 8310 CDF, Br, NC 8260 (VOA) 8270 (Semi-V			2		7				3 BEAR ENERGY SEAR 2.5 LO = 1.9	PRICING * 2120=2.9 ord	Any sub-contracted data will be clearly notated on the analytical report.
	95 T	E / ТМВ's (8021) RO / DRO / МRO)		2)	7)	>			Remarks	Pl- 1 e	ossibility.
Turn-Around Time: □ Standard	DARK CANYON SWD Project #: 702958.001.01	ER DNO	# of Coolers: Frequence Cooler Temp(including cF): 2, Perm Container Type and # Type 2012(402	berges 1 hefedde -WI	200-	1-00-	900-		- - - - - - - - - - - - - - - - -	010-	- 2/0-	Repeived by: Via: - Date Time R	Received by: Via: Date Time	If necessary samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
Chain-of-Custody Record	Mailing Address: 408 W. TEXAS AVE ARTES14 NM 88210 Phone #: 575-746-8768	email or Fax#: QA/QC Package: Standard Accreditation: NELAC	EDD (Type) Date Time Matrix Sample Name	129-20 9:30 SOIL B-LO 14'	9:55 B-6 18'R	8-8 14	10:40 B-8 16' 10:50 B-8 18'	11:00 B-8 20'R.	11:20 B-12 (c' 11:30 B-12 8'	11:35 3-12 10	11.12	Relinquished by:	Date: Time: Relinquished by: MIO MOO ONN	If necessary. samples submitted to Hall Environmental may be sui

Release	Chain	-of-Cu	Chain-of-Custody Record	Turn-Around Time:	And the Physics and a physical difference of the	×							Receive
Clien	TALON	N LPE		□ Standard X Rush 3 -	h 3-DAY		ANAL	1	NV	IRO	ENVIRONMENTAL ZSTS I ABORATOR	TOPV TOPV	ed by
				Project Name:				w haller					OCL
	Mailing Address: 408		W.TEXAS AUE.	DARK CANYON	SwD	4901 H	4901 Hawkins NE		Ibuque	rque, N	Albuquerque, NM 87109): 3/1
	ARTESIA					Tel. 50	Tel. 505-345-3975	10	Fax 5	505-345-4107	-4107		9/20
202/202		575-746-1	8768	Te2958.001,01	10 II 10			Ana		Request			214
	email or Fax#:			-				10	*0	(tu			:51:
DAVAC	QA/QC Package:					ЯM	SN	S r	0 (#	əsq			:411
Z D Standard	ndard		Level 4 (Full Validation)	R. PONS		/ 08	1120	БС		A\tr			PM
Accred	Accreditation:	🗆 Az Co	Az Compliance	Sampler: M. COLLICE	and the second s	אם /		Or	17.0.1				
	AC	□ Other		On Ice: 🖄 Yes	ON D	02			. 10				
	EDD (Type)			# of Coolers: U		(ei							
				Cooler Temp(including CF): S	+ Bennin (°C)	191	1						
Date	Time	Matrix	Sample Name	Container Preservative Type and # Type	HEAL No.	/ ХЭТВ 08:НЧТ Ч Г808	N) 803 PAHs b	RCRA E	N) 0928	S) 0728 Total C			
12-9-20	11:55	2010	13-12 100		-013			12					
	12:05		B-12 18'		-014			2	~				
	12:15		B-12 20'R		-015	ンン		7	c				
	12:30	_	6.35 0-1'		-016	11		7					
	12:35		E,BU 4'		- 0/7			7					
	12:50		E.BU 10'		-018			7					
	1:05		E.BU ZO'R		-019	50		7	~	1. March			
	1:20		W.BU 0-1'		-020	くく		7	~	and S			
	1:30	_	W. BG 4'		-021			7					
	1:45		W. BU 10"		-027		3 8)					
	2:00		W.BU 20'R		-023	$\sqrt{}$	-	7	~				
	ŀ			-	- 1								T
Uate:			ed by: DPLL_	MIMMMANN	12/10/hu 1230	Remarks:	3 BEAR ENERDY	ENE	RUY				— I
Date:	Time:	Relinquished by:	ed by:	Received by: Via:	1 [.]		PRICING	5-00	¥				age
el/a	MOO	(MA	Million (ON COM	(Ulila) (9800	PH JOE J	Ŷ						82 o
	If necessary	r, samples sub	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	ontracted to other accredited laborato	ies. This serves as notice of this	possibility. Any su	b-contracte	d data will	be clearly	notated on	the analytical re	eport.	86

1 g ing



APPENDIX I

SITE MAPS

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Legend



 Bore Hole Dark Canyon SWD 🯉 Impact Area/Spill Area District I 1625 N. French Dr., Hobbs, NM 88240

District II

District IV

Phone:(575) 393-6161 Fax:(575) 393-0720

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

District III 1000 Rio Brazos Rd., Aztec, NM 87410 COMMENTS

Action 21444

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

			COMMENTS			
Operator:				OGRID:	Action Number:	Action Type:
3	BEAR FIELD SERVICES, LLC	1512 Larimer St, Suite 540	Denver, CO80202	372603	21444	C-141
				•	•	
Created By	Comment					Comment Date
rhamlet	C-141 Page 5 "Remediation Plan" ne	eds to be submitted for all Remediation Pla	ans. Future submittals will be denied	without the signed/dated Remedia	tion page.	04/26/2021

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District I 1625 N. French Dr., Hobbs, NM 88240

District II

District IV

Phone:(575) 393-6161 Fax:(575) 393-0720

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

District III 1000 Rio Brazos Rd., Aztec, NM 87410

Action 21444

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS OF APPROVAL

Operator:				OGRID:	Action Number:	Action Type:
	3BEAR FIELD SERVICES, LLC	1512 Larimer St, Suite 540	Denver, CO80202	372603	21444	C-141
OCD	Condition					
Reviewer						
rhamlet	The Remediation Plan is approved with the following conditions: All floor samples 0-4' need to be below closure criteria standards of <50' depth to groundwater from Table 1 of the spill rule. All floor					
	samples >4' need to be below closure criteria standards of 51-100' depth to groundwater from Table 1 of the spill rule. Please make sure the edges/sidewalls are delineated to 600 mg/kg for chlorides.					
	3/10/21 horehole showed no presence of	roundwater				